

Figure 1.

Figure 2.

- PMSF, 5ul

+PMSF, 5ul



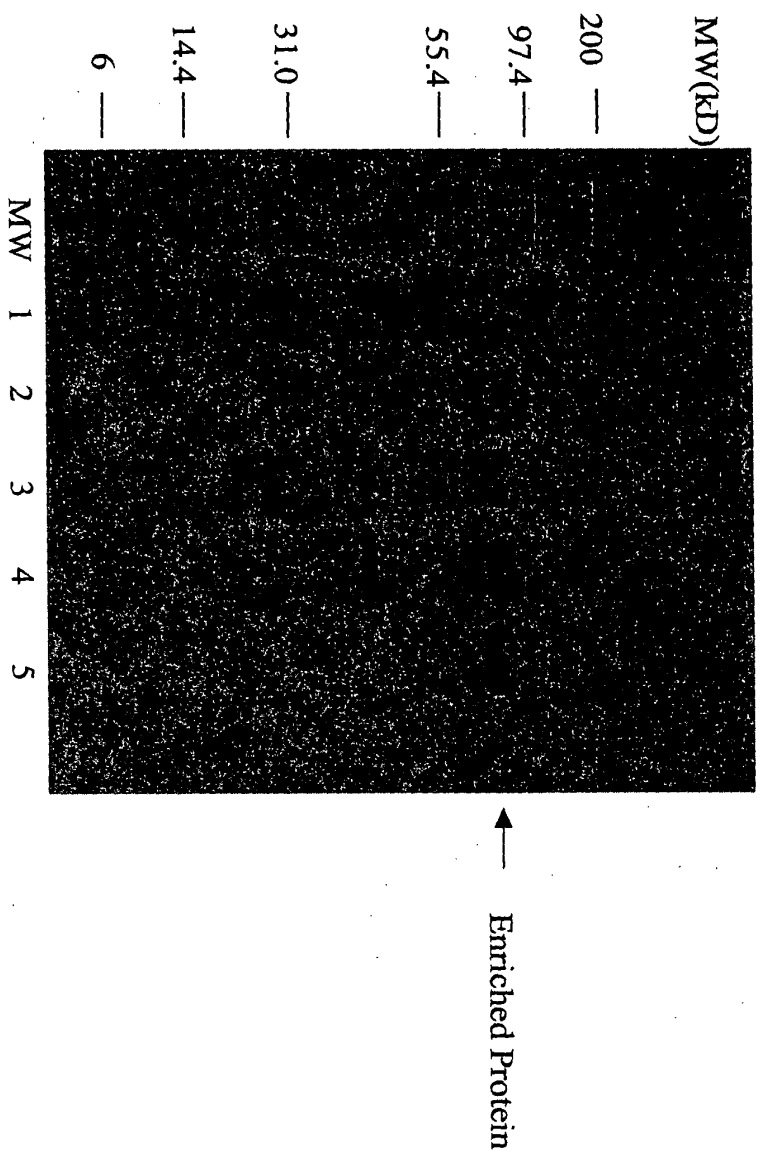


Figure 3.

Nicotianalisin
SEQID NO: 30

TTHTSQFLGL

Tomato

P69A	TTHTSSFLGL
P69B	TTHTPSFLGL
P69C	TTHTPSFLGL
P69D	TTHTPSFLGL
SBT1	TTRSPTFGL
SBT2	TTRSPFLGL
SBT3	TTHTSDFLKL
SBT4B	TTHTSDFLKL
SBT4	TTYTFGYLKL

Arabidopsis

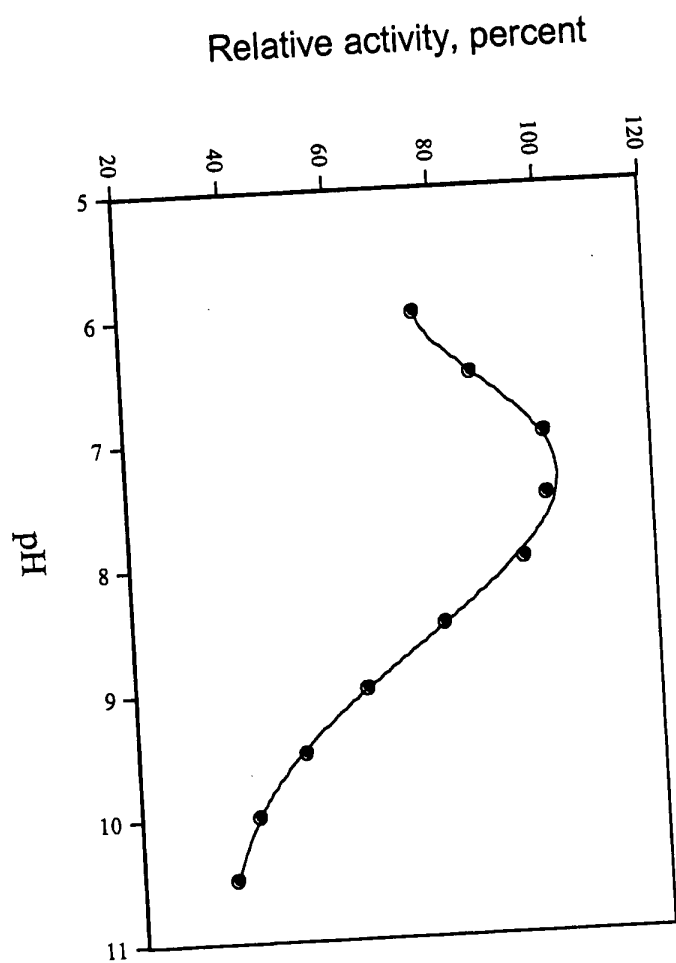
Air3	TTRSWDFLGL
Ara12	TTRTPFLGL

Consensus

TT	FL L
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Figure 4.

Figure 5.



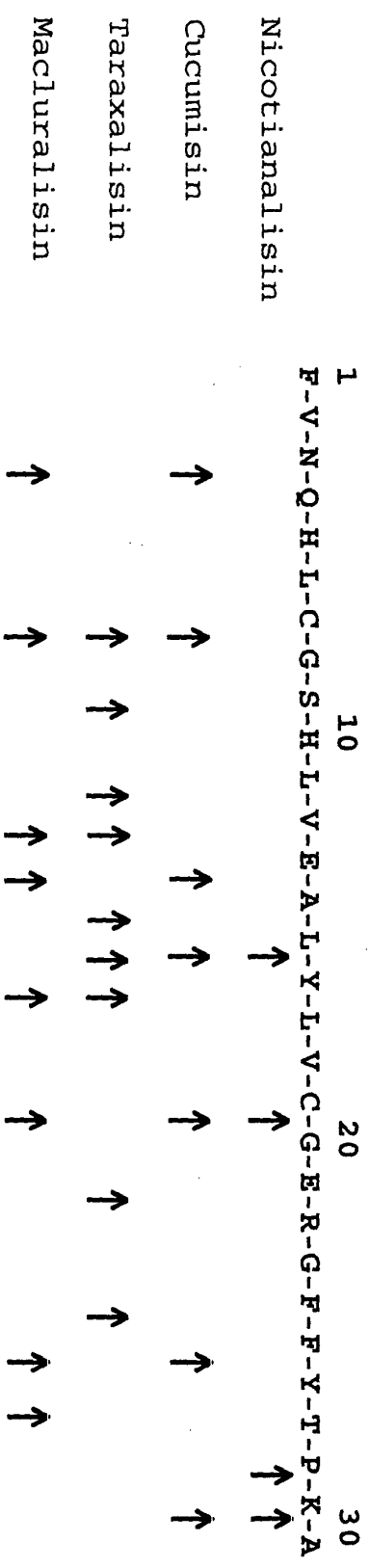


Figure 6.

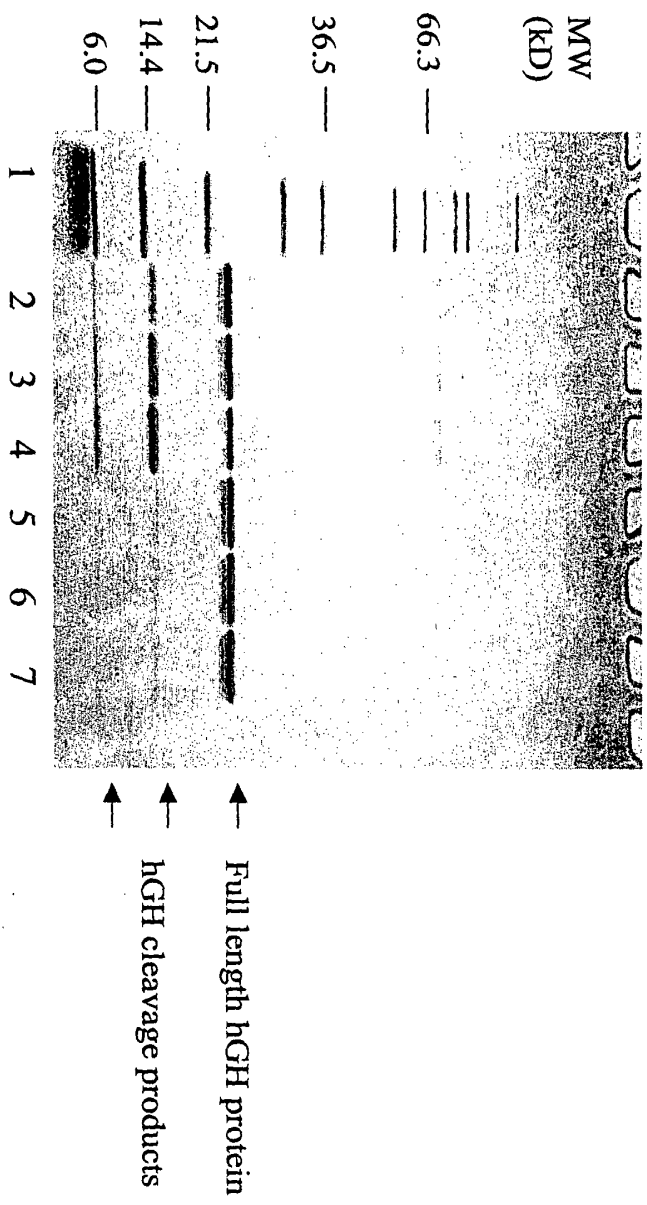


Figure 7.

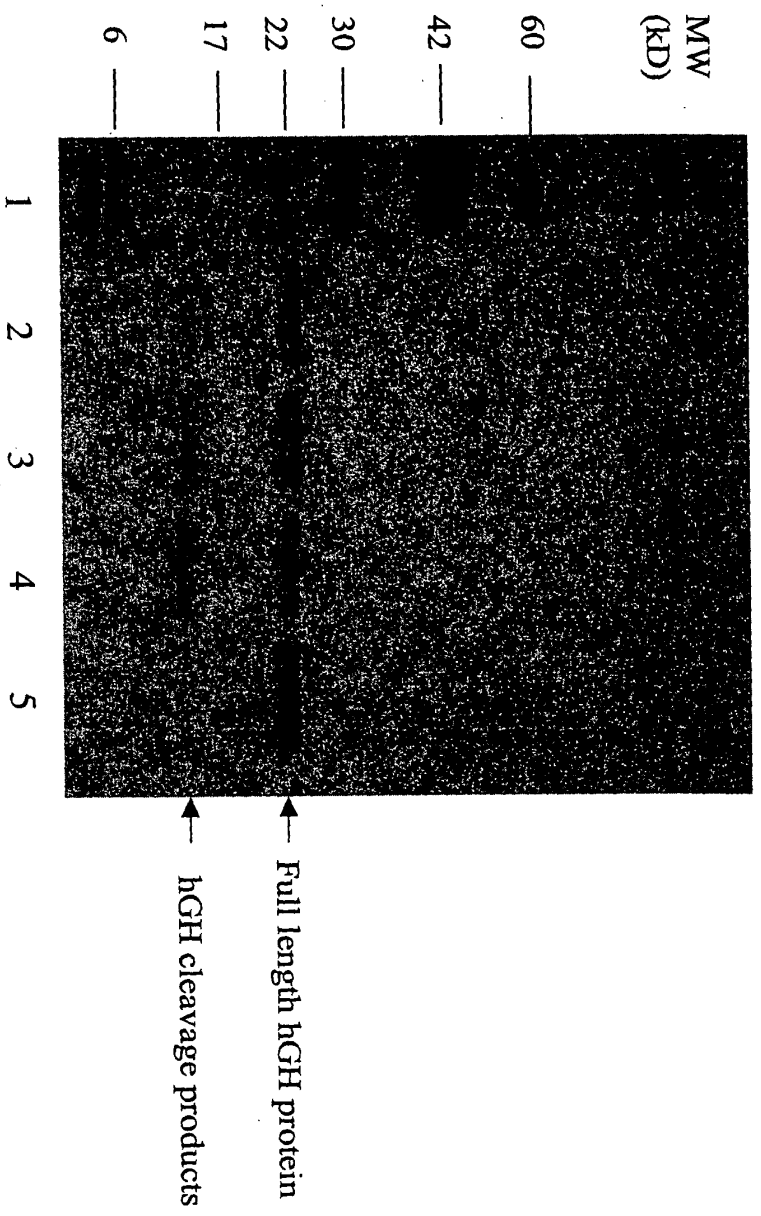


Figure 8.

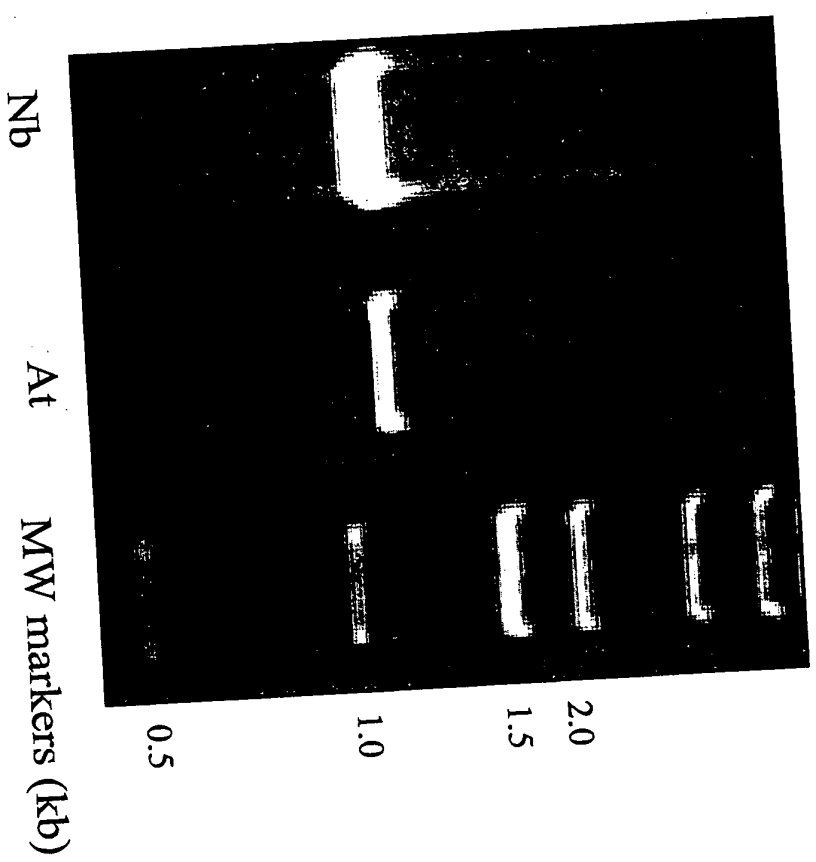


Figure 9.

Figure 10

	*		
Seq ID 24	GVIIGVIDTGIFPDHPSFSDVGMSPPPAKWKGFCEsnFTTKCNKIIGLR	50	
Seq ID 25	GVIIGVIDTGivPDHPSFSDVGMppPPPAKWKGFCEsnFTTKrNNKlIGaR	50	
p69A (tomato)	GVIIGVIDTGILPDHPSFSDVGMppPPPAKWKGVCEsnFTnKCNKlIGaR	50	
Consensus	gviigvidtgi pdhpsfsdvgm pppakwkg cesnft k nnk ig r		
	*		
Seq ID 24	SFRLSEDTPIDTDGHGHTASTAAGAFVKGANFFGNANGTAVGVAPLAHM	100	
Seq ID 25	SFpLdng.PIDenGHGHTASTAAGAFVKANvFGNANGTAVGVAPLAHi	99	
p69A (tomato)	SyqLghgsPIDdDGHGHTASTAAGAFVnGANvFGNANGTAaGVAPfAHi	100	
Consensus	s l pid ghgthtastaagafv gan fgnangta gvap ah		
Seq ID 24	AIYKVC.SFATCSETDALAAMDAAIDDGVDIISASLGGFTNAPLHDDPIS	149	
Seq ID 25	AIYKVCgSdgvCSdveiLpAMDvAIDDGVDILSiSLGGtsN.PfHnDkIa	148	
p69A (tomato)	AvYKVCnSd.gCadTDvLAAMDAAIDDGVDILSiSLGGggssdfysnPIa	149	
Consensus	a ykvc s c l amd aiddgvdi s slgg i		
	*		
Seq ID 24	LGAYSATEKGILASASAGNSE.FDNPVANNAPWILTVGASTHDRKLKATV	198	
Seq ID 25	LGAYSATeRGILvScSAGNSgpFqrtVnNdAPWILTVGASTHDRKLKATV	198	
p69A (tomato)	LGAYSATeRGILvScSAGNngpstgsVgNeAPWILTVGASTqDRKLKATV	199	
Consensus	lgaysate gil s sagn v n apwiltvgast drklkatv		
Seq ID 24	KLGNKEEFEGESADQPKTSNSTFIALFDAGKNASD...QDAPFCRSWAM	244	
Seq ID 25	KLGNKEEFEGESAyhPKTSsSTfftlFDveK...DgtratrAPFCipgsl	245	
p69A (tomato)	KLGNrEEFEGESAyRPKiSNSTffALFDAGKNASD...efetPyCRSgsl	246	
Consensus	klgn eefegesa pk s stf lfd k d p c		
Seq ID 24	TDPAIKGKIVLCQKDPSSLTSSQGRNVKDAGGVGMILINNPEDGVTKSAT	294	
Seq ID 25	TDPsIrGKIVvClvgggvrTvdkGqvVKDAGGVGMILINNPEDGVTKSAe	295	
p69A (tomato)	TDPvIrGKIViClagggvprvdkGqaVKDAGGVGMiINqgrsGVTKSAd	296	
Consensus	tdp i gkiv c g vkdaggvgmi in gvtksa		
Seq ID 24	AHVLPAldVShEEGEKIKAYINSTSNPIAAITFQGTViGDKNAPIVASFS	344	
Seq ID 25	AHVLPAldVsdadGkKILAYINSTSNPvAAITFhGTvLGDKNAPIVASFS	345	
p69A (tomato)	AHViPALDisdadGtKILAYmNSTSNPvAtITFQGTiIGDKNAPIVAaFS	346	
Consensus	ahv pald s g ki ay nstsnp a itf gt gdknapiva fs		
	*		
Seq ID 24	ARGPSRANPGILKPDIIIGPGVNILAAWPTTVNIPNKNTNSGFNIISGTSM	394	
Seq ID 25	sRGPSeAsrGILKPDIIIGPGVNvLAAWPTsVdn.NKNTkStFNIISGTSM	394	
p69A (tomato)	sRGPSgAsiGILKPDIIIGPGVNILAAWPTsVdd.NKNTkStFNIISGTSM	395	
Consensus	rgps a gilkpdiigpgvn laawpt v nknt s fniisgtsm		
Seq ID 24	SCPH	398	
Seq ID 25	SCPH	395	
p69A (tomato)	SCPH	399	
Consensus	scph		

Figure 11

Seq_ID_40	.....	0
Seq_ID_39	.....	0
Seq_ID_25	.....	0
P69D	.....mgflkillififcsflrpsiqsdletyivhvespenqistqssltldlesyy	51
P69A	.....mgflkillvfifcsfpwptiqsnletyivhvespeslistqssltddldsy	51
P69C	.....mgffkilvfifcsfpwptiqsdletyivhvespeslittqssltddldsy	51
P69B	.....mglkillvfifcsfqwptiqsnletyivhvespeslvtqslldlgsyy	51
Seq_ID_24	.....	0
CUSSP	.....mssslifklffflffsnrlasrldsdgkniyivymgrkledpd	46
Seq_ID_19	.....	0
Seq_ID_18	.....ancitmyfllltillltlnpltmaesetyiihmdlsampkafsshqnwylttl	53
Seq_ID_20	.....	0
SBT4	.....mgsrniwfpypylvlfswalsahylaiaqrstyivhldkslmpnvftdhhwhssti	59
SBT3	.....mell.hlllfswalsahflalagrstyivhldkslmpnvftdhhwhssti	51
AG12	.....mklyngiclpylflfasciclalhasstsmekstyivhmdkshmpkaftshhnwysiv	59
AIR3	.....mklthnfsfllllllvhmsskhilaskdsssyvvyfgahshvgeitedamdr	52
Seq_ID_21	.....vfpfffiisfcltpvtisvqsdghetfiihvsksdkprvftthhhwyssii	52
Seq_ID_22	....ptrpvfpfffiisfcltpvtisvqsdghetfiihvsksdkprvftthhhwyssii	56
Seq_ID_23	.....lsssssflliffllnsllvisvqlgdgkftfivhvskskhkphifttrqhwysil	55
MDC16.21	maklsissiffvfp1llcfff.sp.sss.ssdglesyivhvqrshkpslfsshnwvsl	57
Seq_ID_27	marpgg.mvlstflml.f...hvfvhaggnqkktiyiymdksnipadfdhtlwydssl	55
SBT1	merlrl.mfllilmvvl.f...hvfvdarqnqkktiyihmdkfnmpadfdhtqwydssl	55
ARA12	msssf1sstafflllclgfc..hvs.ssssdgq.tyivhmaksqmpssfdlhnwydssl	56
Seq_ID_26h.....	1
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Seq_ID_28	0
F22M8.3mffrsivfffliffasnvsrkqtyihtvtsttkhi	38
Seq_ID_29	0
Consensust i h s	60
Seq_ID_40	.....G.	1
Seq_ID_39	.....G.	1
Seq_ID_25	.....G.	1
P69D	lsflpktttaisssgdeeaas.miysyhnvmkgfaarltaaqvkemekkhgfvsaqkqri	110
P69A	lsflpktttaisssgneeaat.miysyhnvmtgfaarltaaqvkemekihgfvsaqkqrt	110
P69C	lsflpkttttisssgneeaat.miysyhnvmtgfaarltaaqvkemekkhgfvsaqkqri	110
P69B	lsflpkttattisssgneeaat.miysyhnvmtgfaarltaaqvkemekkhgfvsaqkqri	110
Seq_ID_24	.....	0
CUSSP	sahlhramleqvvgstfapesvlhtykrsfngfavklteeeaeekiasmegvvsvflnem	106
Seq_ID_19	.....	0
Seq_ID_18	asvsgssslgtesnrnsfsssklvaytnaihgfssatlspselqviknspgylsstkdm	113
Seq_ID_20	.....tprptrxptrpplrplspseykaiknslgyvssmedrt	38
SBT4	dsikasvps...svdrfhsapklvysydhvfhgfsavlskdelaalkkspgfisaykdr	116
SBT3	dsikasvps...svdrfhsapklvysydnvlhgfsavlskdelaalkklpgfisaykdr	108
AG12	dclnsekp.....ttssfvtytnhvlhgfsaslsdqeldtlrespgfvsaydrn	109
AIR3	vkethydf1gsftgsreratdaifysytkhingfaahldhdlayeiskhpdevsvfpnka	112
Seq_ID_21	rsvs.....qhpskilytyeraavgfसारltaaqadqlrripgvisvlpdev	99
Seq_ID_22	rsvs.....qhpskilytyeraavgfसारltaaqadqlrripgvisvlpdev	103
Seq_ID_23	rsvs.....qhsakilytyeraavgfसारltsqgqadrlrrmpgvsvvpdra	105
MDC16.21	rlspssp.....q.patllysyravhgfsarlspiqtaalrrhpsvisvipdqa	106
Seq_ID_27	kvs.....kganmlytynnvihgystqltadeaksleqqpgilsvheevr	101
SBT1	kvs.....ksanmlytynnvihgystqltadeakalaqqpgillvheevi	101
ARA12	rsis.....dsaellytyenaihgfstrltqeeadslmtqpgvisvlphehr	102
Seq_ID_26	.....	1
SBT2	ksvlpstte...vektgdgeerilysyqtafhgvaaglseeevkkqlqerngvlavfpeik	113
Seq_ID_28	.....	0
F22M8.3	vtslfnslqtenindddfs1peihiyenamsghsatltdqldtvkntkgfisaypdel	98
Seq_ID_29	0
Consensus	s y y g f a l g s	120

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Seq_ID_39VIIGVIDTGIVPDHP.SFSDVGMPPP	26
Seq_ID_25VIIGVIDTGIVPDHP.SFSDVGMPPP	26
P69D	fslhtthtspflglqqnmgl....wkdsnfvgvVIIGVlDTGIlPDHP.SFSDVGMPPP	164
P69A	lsldtthtssflglqqnmgv....wkdsnygkgVIIGVIDTGIlPDHP.SFSDVGMPPP	164
P69C	lshtthtspflglqqnmgl....wkdsnygkgVIIGVIDTGIVPDHP.SlSDVGMPPsP	164
P69B	lshtthtspflglqqnmgv....wkdsnygkgVIIGVIDTGIlPDHP.SFSDVGMPPP	164
Seq_ID_24	.....gVIIGVIDTGIfPDHP.SFSDVGMsPP	26
CUSSP	nelhttrswdflglfpltvpr....r..sqvesnivvGVlDTGIwPesP.SFDeGfsPP	158
Seq_ID_19	.....V.....stqsaitagDdGisev	17
Seq_ID_18	vkidgatescflglnsdsaga....wpksdygkdVivGlvDTGIwPesK.SynDnGMtev	167
Seq_ID_20	pkihthtssflglssmygs....wpksnygkgVIIGVvDTGvWPeik.SFdDdGMSqv	92
SBT4	vepdtttftfgyklpnsgl....wpasglgqdmIIGVlDsGIwPesasfqdD.GiPei	170
SBT3	vephtthtsdflklpnssgl....wpasglgqdvIvaVlDsGIwPesasfqdD.GMPei	162
AG12	atldtthtprflslnptggl....wpasnygedVIIGVIDsGvWpesdsfkDdgmTaqv	164
AIR3	lklhttrswdflglehnsyvpsssiwrkarfgedtIIanlDTGvWpesK.SFrDeGlgPi	171
Seq_ID_21	rhlhtthtptflgla..dsf...glwpsndyaddVivGVlDTGIwPerP.SFSDeGlstv	153
Seq_ID_22	rhlhtthtptflgla..dsf...glwpsndyaddVivGVlDTGIwPerP.SFSDeGlstv	157
Seq_ID_23	rqhlthtptflgla..dsf...glwpsndyaddVivGVlDTGIwPerP.SFSDgGlsav	159
MDC16.21	reihtthtpaflgfs..qns...glwpsnygedVivGVlDTGIwPeHP.SFSDsGlgPi	160
Seq_ID_27	yelhttrsptflglegresk...sflqlaetrseVIIGVlDTGvWpesK.SFdDtGlgPv	157
SBT1	yelhttrsptflglegresr...sfpqtearseVIIGVlDTGvWpesK.SFdDtGlgqv	157
ARA12	yelhttrtpflglld.elta...dlfpeagsysdVvvGVlDTGvWpesK.SySDeGfgPi	157
Seq_ID_26	.....	1
SBT2	yqlhttrsplflglldredss...klwadrlsdhnVivGVlDTGIwPesP.SFnDsGMtsv	169
Seq_ID_28	.....	0
F22M8.3	lslhttsheflglefgig....lwnetslssdVIIGlvDTGIsPeH.vSFrDthMtPv	152
Seq_ID_29	0
Consensus	lhTt flgl w s viigv Dtgiwpe p sf d g	180

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Seq_ID_39	PAKWKGFCES...NFTTKCNKLIGARSFPLDNG.....PIDENGHGTH	67
Seq_ID_25	PAKWKGFCES...NFTTKrNNKLIGARSFPLDNG.....PIDENGHGTH	67
P69D	PAKWKGvCES...NFTTKCNKLIGARSyqLgNGs.....PIDdNGHGTH	206
P69A	PAKWKGvCES...NFTnKCNNKLIGARSyqLghGs.....PIDddGHGTH	206
P69C	PAKWKGvCES...NFTnKCNNKLIGARSyqLaNGs.....PIDddGHGTH	206
P69B	PAKWKGvCES...NFTnKCNNKLIGARSyqLgNGs.....PIDsiGHGTH	206
Seq_ID_24	PAKWKGFCES...NFTTKCNKliIGlRSFrLsedt.....PIDtdGHGTH	68
CUSSP	PpKWKGtCet...snnfrCNrKiIGARSyhgripispg.....dvngPrDtNGHGTH	207
Seq_ID_19	PsrWKGvCESgtefnsslCNkKLIGARyFnkgllannpn...lnismnssrDtdGHGTH	73
Seq_ID_18	PsrWKGvCESgtqfnsslCNkKLIGARyFnkgllannpn...itismnsarDtdGHGTH	223
Seq_ID_20	PsrWKGiCqgtgtqfnsslCNkKLIGARyFnkgllskvkn...ltiminsarDteGHGTH	148
SBT4	PkrWKGiCnpgtqfnTsmCNrKLIGARyFnkgllaedpn...lnismnsarDtNGHGTH	226
SBT3	PkrWKGiCkpgtqfnasmCNrKLIGARyFnkgilandpt...vnitmnsarDtdGHGTH	218
AG12	ParWKGiCsr.egfnssmCNsKLIGARyFnngimaaipn...atfsmnsarDtlGHGTH	219
AIR3	PsrWKGiCqn.qkdaTfhCNrKLIGARyFnkgyaavgh...lnsfdsPrDldGHGsH	226
Seq_ID_21	PssWKGkCvtgpdfeTsCNkKiIGaQmFykgyeahk.g.pmdeskesksPrDteGHGTx	211
Seq_ID_22	PssWKGkCvtgpdfeTsCNkKiIGaQmFykgyeahk.g.pmdeskesksPrDteGHGTH	215
Seq_ID_23	PsgWKGkCEtgldfpaTsCNrKiIGARlFykgyeadr.gspideskesksPrDteGHGTH	218
MDC16.21	PstWKGvCEigpdpfpassCNrKLIGARaFyrgyltqrngtkkhaakesrsPrDteGHGTH	220
Seq_ID_27	PmsWKGvCqigknfkassCNrKLIGARfFsqqyaaafga..idettesksPrDddGHGTH	215
SBT1	PasWKGkCqgtgknfdassCNrKLIGARfFsqqyaaafga..idetiesksPrDdeGHGTH	215
ARA12	PssWKGvCEagtnftaslCNrKLIGARfFargyestmmp..ideskesrsPrDddGHGTH	215
Seq_ID_26	.....	1
SBT2	PshWKGvCEtgrgfehhCskKivGARvFfrygaaasgk..inergefsksarDqdGHGTH	227
Seq_ID_28	.....	0
F22M8.3	PsrWrGsCdegtnfssseCNkKiIGAsaFykgyesivgkin..ettdfrstrDaqGHGTH	210
Seq_ID_29	0
Consensus	p wkg ce g f cn kligar f g sprd gHgth	240

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Seq_ID_39	TASTAAGAFVKGANVFGNANGTAVGVAPLAYIAIYKVCSDGV...CSDVEILAAMDVAI	124
Seq_ID_25	TASTAAGAFVKGANVFGNANGTAVGVAPLAhIAIYKVCSDGV...CSDVEILpAMDVAI	124
P69D	TAgTAAGAFVKGvNiFGNANGTAVGVAPLAhIAvYKVCsSDGg...CSDsdILAAMDaAI	263
P69A	TASTAAGAFVnGANVFGNANGTAaGVAPfAhIAvYKVCnSDG...CaDtdvLAAMDaAI	262
P69C	TASTAAGAFVnGANVFGNANGTAVGVAPLAhIAIYKVCsSDG...CSDsdILAAMDaAI	262
P69B	TASTAAGAFVKGANVGNAdGTAVGVAPLAhIAIYKVCnSVg...CSesdvLAAMDsAI	262
Seq_ID_24	TASTAAGAFVKGANfFGNANGTAVGVAPLAhmAIYKVCsfat...CSetdaLAAMDaAI	124
CUSSP	TASTAAGglVsqaNlyGlgLTARgGvPLArIAaYKVCwnDG...CSDtdILAAYdDAI	263
Seq_ID_19	TsSTAAGsyVeGAsyFGyAGGALGAPKAhvAmYKalwe.eg...vylsdvLAAIdQAI	129
Seq_ID_18	TsSTAAGshVesAsyFGyArGsAtGmAPKAhvAmYKalwe.eg...tmlsdILAAdQAI	279
Seq_ID_20	TsSTAAGslVKGAsyFGyApGfAiGVAPmAhvAvYKalwdgag...t.isdILAAdQAI	204
SBT4	sASIAAGnFaKGvshFGyAqGTARGVAPqArIAvYKfsfr.eg...sltsdILAAMDqAv	282
SBT3	cASitAGnFaKGvshFGyApGTARGVAPrArIAvYKfsfn.eg...tftsdILAAMDqAv	274
AG12	TASTAAGnyVnGAsyFGyGkGTARGiAPrArvAvYKVtwp.eg...rytsdvLAGIdQAI	275
AIR3	TlSTAAGdFVpGvsiFGqgNGTAKGgsPrArvAaYKVCwppvkgneCyDadvLAAfDaAI	286
Seq_ID_21	TASTAAGslVanAsfyqyAkGeArGmAikArIAaYKiCwknG...CfnsdILAAMDqAv	267
Seq_ID_22	TASTAAGslVanAsfyqyAk...GmAikArIAaYKiCwknG...CfnsdILAAMDqAv	267
Seq_ID_23	TASTAAGsvVanAsfPqyAkGeArGmAikArIAaYKiCwktG...CfDsdILAAMDqAv	274
MDC16.21	TASTAAGsvVanAslyqyArgTATGmAskArIAaYKiCwtgG...CyDsdILAAMDqAv	276
Seq_ID_27	TAtTAAGsvVtGAslFGyAaGTARGmAshArvAaYKVCwagG...CfssdILAGMDqAv	271
SBT1	TATTAAGsvVtGAslLGyAtGTARGmAshArvAaYKVCwtgG...CfssdILAGMDqAv	271
ARA12	TsSTAAGsvVeGAslLGyAsGTARGmAPrArvAvYKVCwlgG...CfssdILAAdKAI	271
Seq_ID_26	.....	1
SBT2	TAgTvAGsvVrGANllGyAyGTARGmAPgArvAaYKVCwvgG...CfssdILsAvDqAv	283
Seq_ID_28	.....	0
F22M8.3	TASTAAGdiVpkANYFGqAkGLAsGmrftsrIAaYKaCwalG...CastdviAAIdRAI	266
Seq_ID_29	.....	0
Consensus	tastaag v gas fgya gta g ap aria ykvcw g c sdilaamd ai	300

Seq_ID_40	DDGVDILSISLGG.TS.NPFHNDKIALGAYSATERGILVSCSAGNSGPFQRTVDNDAPWI	182
Seq_ID_39	DDGVDILSISLGG.TS.NPFHNDKIALGAYSATERGILVSCSAGNSGPFQRTVDNDAPWI	182
Seq_ID_25	DDGVDILSISLGG.TS.NPFHNDKIALGAYSATERGILVSCSAGNSGPFQRTVnNDAPWI	182
P69D	DDGVDILSISLGG.st.kPFHdDgIALGtYSATERGIFVsSaSAGNSGPsIgtVaNAPWI	321
P69A	DDGVDILSISLGG.ggssdFysnpIALGAYSATERGILVSCSAGNnGPstgsVgNeAPWI	321
P69C	DDGVDILSISLGG.sp.iPlyeDsIAmGAYSATERGILVSCSAGNdGhsmgsVDNsAPWI	320
P69B	DDGVDILSISLGG.gp.iPFHrDnIAiGAYSATERGILVSCSAGNSGPsfiTavNtAPWI	320
Seq_ID_24	DDGVDIIsaSLGG.ftnaPlHdDpIsLGAYSATEKGIlaSaSAGNS.eFdnPvAnNAPWI	182
CUSSP	adGVDIIsISvGG.anprhyfvDaIAiGsfhAveRGILtSnSAGNgGPnfftaslsPWl	322
Seq_ID_19	tDGVDvLSlSLG..idaiPlHeDpvAiaAfaAlEkGIfVStSAGNeGPpyeTlhnGtPWv	187
Seq_ID_18	edGVDIIsISLGG..iddlalyeDpvAiatfaAmEkdIfVStSAGNeGPddqalhnGtPWv	337
Seq_ID_20	adGcDILSISfGa.vSpfPlyiDpIsiasfSAMekGIfVsSAGNeGPPdqsIsNeAPWf	263
SBT4	adGVDmISISfs..nrfiPlyeDaIsiasfGAmmkGvLVSaSAGNrGhswgTVNgSPWI	340
SBT3	adGVDmISISyG..yrfiPlyeDaIsiasfGAmmkGvLVSaSAGNrGPgigslNngSPWI	332
AG12	adGVDvisISLGG..ydgvpPlyeDpIAiasfaAmEkGvvVStSAGNaGPPfgnmhNgIPWv	333
AIR3	hdGaDvisSVSLGG.ep.tsFfNDsvAiGsfhAakkrIvVvCSAGNSGPadsTVsNvAPWq	344
Seq_ID_21	DDGVhvisISvGangyaphylyDsIAiGafgAsEhGvLVSCSAGNSGPgayTavNiAPWm	327
Seq_ID_22	DDGVhvisISvGangyaphylyDsIAiGafgAsEhGvLVSCSAGNSGPgayTavNiAPWm	327
Seq_ID_23	adGVhvisISvGadgyapeydaDsIAiGafgAsEhGvvVSCSAGNSGPgasTavNvAPWI	334
MDC16.21	adGVhvisISvGasgSapeyHtDsIAiGafgATrhGivVSCSAGNSGPnpeTatNiAPWI	336
Seq_ID_27	iDGvNvLSlSLG..gtisdyrrDivAiGfSAasqGIfVSCSAGNgGPgsgslNaAPWI	329
SBT1	iDGvNvLSlSLG..gtisdyHrDivAiGfSAasqGIfVSCSAGNgGPssgTlsNvAPWI	329
ARA12	aDnVnVLSmSLG..ggmsdyrrDgvAiGafaAmERGILVSCSAGNaGPsssslsNvAPWI	329
Seq_ID_26	.....	1
SBT2	adGVnILSISLGG..ggvssynrDelsiaAfgAmEkGvfVSCSAGNgGdpisltNvsPWI	341
Seq_ID_28	.....	0
F22M8.3	lDGVDvisISLGG..SsrPFyvdPIAiagfgAmqknIfVSCSAGNSGptasTVsNgAPWl	324
Seq_ID_29	.....	0
Consensus	dgvd s slg d iaigaf a e gi vscsagn gp t n apwi	360

Seq_ID_40	LTVGASTHDRKLKATVKLGNKEEFEGE...SAYHPKTSNSTFFTLFDVEKIVHEQPVPAPF	239
Seq_ID_39	LTVGASTHDRKLKATVKLGNKEEFEGE...SAYHPKTSNSTFFTLFDVEKIVHEQPVPAPF	239
Seq_ID_25	LTVGASTHDRKLKATVKLGNKEEFEGE...SAYHPKTSsSTFFTLFDVEKdgratrAPF	239
P69D	LTVGASTHDRKLKvTVKLGNSSEFEFE...SAYHPKTSNSTFFpLyDagKnesdQfsAPF	378
P69A	LTVGASTqDRKLKATVKLGnrEEFEFE...SAYrPKiSNSTFFaLFDagKnasdefetPy	378
P69C	LTVGASTlDRKiKATVKLGnrEEFqGE...SAYrPqiSNSTFFTLFDaaKnasdefktPy	377
P69B	LTVGASTlDRKiKATVKLGNgEEFEFE...SAYrPKiSNaTFFTLFDaaKnakdpsetPy	377
Seq_ID_24	LTVGASTHDRKLKATVKLGNKEEFEGE...SAdqPKTSNSTFiaLFDagKnasdQ.dAPF	238
CUSSP	LsVaASTmDRKfvtqVqiGNgqsFqGv...SintfdnqyyplvsgrDipntgfdkstarF	379
Seq_ID_19	LTVaAgTvDRefiGtltLGNgvsvpGl...SLYpgnsSsSesslvvyve.cqddke.....	238
Seq_ID_18	LTVaAgTvDRefiGtLsLGNgvsvtGl...SLYpgnsSsSessivFlktcleeke.....	389
Seq_ID_20	LsVaASTvDRdviriltLGNgvsvtGl...SLYpgns.tSdisvilvkncldkqe.....	314
SBT4	LcVaAgftDRtfagTltLGNglkirGw...SlfparafvrdFpviynktlscdcsdalls	397
SBT3	LcVasgHtDRtfagTltLGNglkirGw...Slfparafvrdspviynktlscdcsdalls	389
AG12	LTVaAgniDRsfagTltLGNdqtitGw...tmfpasaiiessqlvynktisacnstells	390
AIR3	iTVGASTmDRRefasnvlLGNgkhykGqslsStalPhakfypimasvnakaknasaldAql	404
Seq_ID_21	LTVGASTiDRRefAdViLGNdriFgGvslySg..npltdaklpvvyvgdgcg.....sky	379
Seq_ID_22	LTVGASTiDRRefAdViLGNdriFgGvslySg..npltdaklpvvyvgdgcg.....sky	379
Seq_ID_23	LTVaASTiDRRefAdViLGDgriFgGvslySg..dplgdSkplplvyvgdgcg.....sql	386
MDC16.21	LTVGASTvDRRefAAnaitGdgkvFtGtslyag..eslpdSqlslvyvgdgcg.....srl	388
Seq_ID_27	tTVGAgTmDRRefAyisLGNgkFfsGvslySg..kalpsSvmplyvagnasqasn..gnl	385
SBT1	tTVGAgTmDRRefAyigigNgkklngvslySg..kalpsSvmplyvagnvsqssn..gnl	385
ARA12	tTVGAgTlDRdfpAlailLGNgknFtGvslyfkg..ealpdklplfiyagnasnatn..gnl	385
Seq_ID_26	.....	1
SBT2	tTVGASTmDRdfpATVeLGTgkivtGaslykgzmnltstqkqypliylgsnssnlmP.ssl	400
Seq_ID_28	.....	0
F22M8.3	mTVaASytdRtFpAiVriGNrkslvGsslykgk.....SlknlplafnrtagEesgAvF	378
Seq_ID_29	.....	0
Consensus	ltvgast dr f atv lngn f g s s	420

Seq_ID_40	CIPGSLTDP.....	248
Seq_ID_39	CIPGSLTDP.....	248
Seq_ID_25	CIPGSLTDPsirgkivvcclvgggvrtvdkgqvkdagvggmilinnpedgvtksaeahvl	299
P69D	CsPGSLnDpaikgkivclrsislrrvaqqsvkdagvggmilineqkrvgtksaeahvl	438
P69A	CrsgSLTDPvirgkivclagggvprvdkgqavkdagvggmiliinqrsgvtksadahvl	438
P69C	CrPGSLTDPairgkivclafggvtivdkgqavkdagvggmiiinspddgvtkssadahvl	437
P69B	CrrGSLTDPairgkivlcsalghvanvdkgqavkdagvggmiiinspdygvtkssadahvl	437
Seq_ID_24	CrswamTDPaikgkivlcqkdpssltssqgrnvkdagvggmilinnpedgvtkssatahvl	298
CUSSP	CtdkSvnpnllkgkivvceasfgphffksldg..aagvlmtsn.....trdyadsypl	431
Seq_ID_19	lqknahkfivvcldknd.....svgehvynvrnskvagavfitn...t.tdl.efylqsef	288
Seq_ID_18	leknaahkfavcydtng.....svsdqlynvkntkvaggifitn...y.tdl.efylqsef	439
Seq_ID_20	lqnvtckfivvcidkna.....lvkgqvsvrhnnaagavfitnd..fvtdlge.ylktef	366
SBT4	qfPdpgntiicdyknledgfgfdsqifhvtgarfkagifise...dpavfrvasft.h	452
SBT3	qvenpentivicddn..gd.fs.d.gmriitrarlkaaifise...dpgvfrsatfp.n	439
AG12	davyS...vviceait.....piyaqidaitrsnvagailisn...htklfelgggvsc	438
AIR3	CklGSLdpiktkgkilvclr.ggnarvekgavkqagvggmilanladsgeelvadshll	463
Seq_ID_21	CyPGkLdpkkvagkivlclr.ggnarvekgavkqagvggmilanladsgeelvadshll	438
Seq_ID_22	CyPGkLdpkkvagkivlclr.ggnarvekgavkqagvggmilanladsgeelvadshll	438
Seq_ID_23	CyPGmLdpkskvagkivlclr.ggnarvekgavklaggagmvlanladsgeelvadshll	445
MDC16.21	CyPGkLnsslvvegkivlclr.ggnarvekgavklaggagmilantaesgeeltadshlv	447
Seq_ID_27	CtsGSLipekvvgkivvclr.gmnaraqkgvlvkdaggigmilantdygdelvadahl	444
SBT1	CtsGSLipekvvgkivvclr.gmnaraqkgvlvkdaggigmilantdygdelvadahl	444
ARA12	CmtGtLipekvvgkivmclr.ginarvqkgdvvkaagvggmilantaangeelvadahl	444
Seq_ID_26	.....	1
SBT2	CldGtLdkasvagkivclr.gisprvqkgqvkeagvggmiltntaangeelvadshll	459
Seq_ID_28	.....driekgavknagvggmilinrlqdgstksadahvl	36
F22M8.3	CIRDsLkrelvegkivclr.gasgrtakgeevkrsggaamlvsteaeegeelladphvl	437
Seq_ID_29	.....	0
Consensus	c g l gkiv c g v kg vk agvggmil n g ad h l	480

Seq_ID_40	.....S.....	249
Seq_ID_39	.....S.....	249
Seq_ID_25	paldvsdadgkikilayi.nstsnpvaaitfhgtvlgd.knapivasfssrgpseasrgil	357
P69D	paldvsnadgkikilaym.nsssnpvasitfhgtvlgd.knapivasfssrgpsvaspgil	496
P69A	paldisdadgkikilaym.nstsnpvaatitfhgtiigd.knapivaafssrgpsgasigil	496
P69C	paldvsdadgkikilaym.nstsnpvaatitfhgtiigd.knapmvaafssrgpsraspgil	495
P69B	palvvsaadgkikilaym.nstsspvatitfhgtiigd.knapmvaafssrgpsraspgil	495
Seq_ID_24	paldvsheegekikayi.nstsnpiaaitfhgtvlgd.knapivasfsargpsranpgil	356
CUSSP	pssvldpndllatlrlyi.yisirspgatitfksttiln..asapvvvsfssrgpnratkdvi	488
Seq_ID_19	.....	288
Seq_ID_18	pavflnfedgdkvleyi.knshspkarlefqvthlga.kpapkvasyssrgpsescpfil	497
Seq_ID_20	psvflnfqngdqvlkyv.nstsspkakigltggtligv.erapavahfssrgpsmtcpfil	424
SBT4	lgvvidkkekqkvinyv.knsvsptatitfgetyvdrerpfpflgyssrgpsrsyagia	511
SBT3	pgvvvnkkekqkvinyv.knsvtptatitfgetyldt.kpavvaassargpsrsylgis	497
AG12	pclvispkdaalikya.ktdefplaglkfgetitgt.kpapavayysrgpspsypgil	496
AIR3	patqltskdsfavryi.sqtckpiahtpstrtdlg.lkpapvmassfsskgpsivapgil	521
Seq_ID_21	patmvgqkagdkirhyv.tsdpstativfrgtvigkspaaprvaafssrgpnhltpcil	497
Seq_ID_22	patmvgqkagdkirhyv.tsdpstativfrgtvigkspaaprvaafssrgpnhltpcil	497
Seq_ID_23	patmvgqkagdeirdyv.ksdsspkativfkgtvigkspapriaafsgrgpnnyvtpeil	504
MDC16.21	ptgavgqtagxlirxyi.asdsnpittiafggtklgvqp.spvvaafssrgpnitpeil	506
Seq_ID_27	ptgavgqtagxlirxyi.asdsnpittiafggtklgvqp.spvvaafssrgpnitpeil	502
SBT1	ptaavgqtagnlkqyi.asnsnptatiafggtklgvqp.spvvaafssrgpnitpdl	502
ARA12	pattvgekagdiirhyv.ttdpnptasisilgtvvgvqp.spvvaafssrgpnsitpnil	502
Seq_ID_26	.....	1
SBT2	pavavgeregraiklya..agrsatatlrflgtklgirp.spvvaafssrgpnflsleil	516
Seq_ID_28	paldvsffdgfqiteym.kstknparitfhgtiigd.knapvlagfssrgpstaspgil	94
F22M8.3	pavslgfsdgkttlnylag.aanatasvrfrgtayg..atapmvaafssrgpsvagpeia	494
Seq_ID_29	.....	0
Consensus	pa v g i y s p a i f g t g ap va fssrgps p il	540

Seq_ID_40	.....	249
Seq_ID_39	.....	249
Seq_ID_25	kpdiigpgvnlvaawptsvd....nnkntkstfniisgtmsmcp.....	397
P69D	kpdiigpgvnlvaawptsvd....nnkntkstfniisgtmsmcpnlsgvaallksahpd	551
P69A	kpdiigpgvnilaawptsvd....dnkntkstfniisgtmsmcpnlsgvraallksthpd	551
P69C	kpdiigpgvnilaawptsvd....dnkntkstfniisgtmsmcpnlsgvaallksthpd	550
P69B	kpdiigpgganilaawptsvd....dnkntkstfniisgtmsmcpnlsgvaallksthpd	550
Seq_ID_24	kpdiigpgvnilaawptttni....pnkntnsgfniisgtmsmcp.....	398
CUSSP	kpdisgpgveilaawpsvapv....ggirrntlfniisgtmsmcphtgiatyvktynpt	544
Seq_ID_19	.....	288
Seq_ID_18	kpdlmapgalilaswpqkspatqi.rsgelfsnfniisgtmsmcpaagvaallkgahpk	556
Seq_ID_20	kpdlmapghlilaswplssvspy..t.elhnifniisgtmsmcpaagvaalvkgtphpe	481
SBT4	kpdimapgalilaavppnipsvsi.enlqltttdyelksgtsmaaphaagiaamlkgahpd	570
SBT3	kpdiapgvnilaayppnvfatsignillstidyilesgtmsmaaphaagiaamlkaahpe	557
AG12	kpdmmapgslvaswipneataqigtnvylsshynmvsgtsmacphasgvaallkaahpe	556
AIR3	kpditapgvsviaaytgavspnteqfdpr.1lfnaisgtmsmcphtgiatyvktynpt	580
Seq_ID_21	kpdiviapgvnialagwtgsvgptdl.didtrrvefniisgtmsmcpvhvglaallrrahpk	556
Seq_ID_22	kpdiviapgvnialagwtgsvgptdl.didtrrvefniisgtmsmcpvhvglaallrrahpk	556
Seq_ID_23	kpdiviapgvnialagwtgsvgptdl.eidtrrvefniisgtmsmcpvhvglaallrkaypk	563
MDC16.21	kpdiviapgvnialagwtgmvgptdl.didprrvqfniisgtmsmcpvhvglaallrkahpd	565
Seq_ID_27	kpdiapgvnilagwtgkvgtgl.pedtrnvgnfniisgtmscxhvsghlaallxaahpe	561
SBT1	kpdiapgvnilagwtgkvgtgl.qedtrnvgnfniisgtmsmcpvhvglaallkaahpe	561
ARA12	kpdiapgvnilaawtgagptgl.asdsrrvefniisgtmsmcpvhvglaallksvhpe	561
Seq_ID_26	.....	1
SBT2	kpdmvapgvnilagwtgalgsssl.pidqrntfniisgtmsmcpvhvgiaallkarhpd	575
Seq_ID_28	kpdiigpgvnlvaawptsvenktn....tkstfniisgtmsmcpnlsgvaallksahpt	149
F22M8.3	kpdiapgvnilagwspfspp.sllrsdprrvqfniisgtmsmcphtgiatyvktynpt	553
Seq_ID_29	.....	0
Consensus	kpd apgvnila w v fniisgtmsmcp sg aallk hp	600

Seq_ID_40	.....	249
Seq_ID_39	.....	249
Seq_ID_25	.....	397
P69D	wspaaiksammttadtlnlanspilde.r...lisadlfamgaghvnpstrasdpglvydt	607
P69A	wspaaiksammttadtlnlanspilde.r...llpadiyaigaghvnpstrandpglvydt	607
P69C	wspaaiksaimttadtlnlanspilde.r...llpadifatgaghvnpstrandpglvydi	606
P69B	wspaviksammttadtlnlanspilde.r...llpadiyaigaghvnpstrandpglvydt	606
Seq_ID_24	.....	398
CUSSP	wspaaiksalmttaspmn.....a.r...fnpqaeafaygsgghvnpkavrpglvyda	592
Seq_ID_19	.....p.....	289
Seq_ID_18	wspaaairsammttadtmdnmqmpirdi.gr.nnnaasplamgagrlnpnkaldpgliydi	614
Seq_ID_20	wspaaairsammttadvldntqspiqdi.grpenaaatplamgaghlnpnkaidpgliyd	540
SBT4	wspaaairsammttanhlnsaqdpite...dddmvasplgigsgghvdpnraldpglvyda	626
SBT3	wspaaairsammttadpldntrkpkids...dnkkaatpldmgaghvdpnraldpglvyda	614
AG12	wspaaairsammttanpldnlnpihen.g.kkfhlaspamgaghidpnraldpglvyda	614
AIR3	wspaaairsaimttatimddipgpigna.tn...mkatpfsfgaghvqpnlavnpglvydl	636
Seq_ID_21	wtpaavksalmttaynldnsgkvftdl.a..tggestpfvhgsgghvdpnraldpgliydi	613
Seq_ID_22	wtpaavksalmttaynldnsgkvftdl.a..tggestpfvhgsgghvdpnraldpgliydi	613
Seq_ID_23	wttaaiksalmmttaynvdnsgkftfdl.a..tgqesspfvhgsgghvdpnraldpglvydi	620
MDC16.21	wspaaiksalmvttaydvnsgepiedl.a..tgksnsfihgaghvdpnklnpglvydi	622
Seq_ID_27	wsxgvralsalmttgysthknxmiadv.a..tgmsytpvdhgaghvnpaaampglxydl	618
SBT1	wspaaairsalmmtsystyknktiedv.a..tgmsstpfdygaghvnpaavspglvydl	618
ARA12	wspaaairsalmttayktykdgkplldi.a..tgkpstpfdhgaghvspttatnpgliyd	618
Seq_ID_26	.....asdgaghlnprkavdpglvydi	23
SBT2	wspaaiksalmmttayvhdntykslkda.s..svtpstpydhgaghvnpkavdpglvydi	632
Seq_ID_28	wspaaiksaimttadtlnlannpilde.mlr...panifaigaghvnpstrandpglvydt	205
F22M8.3	wspamiksaimttaritdnrnrpigrdgaagaesaatafaagagnvdptravdpglvydt	613
Seq_ID_29	.....aitaghvnpesaidpgliyd	21
Consensus	wspaa i sa m t t a p i d g a g h v p a d p g l v y d	660
Seq_ID_40	.....	249
Seq_ID_39	.....	249
Seq_ID_25	.....	397
P69D	pfedyipylcglnyt...nrevgkvqlrkvncsevskripegqlnypsfsirlg.s....	658
P69A	pfedyvpylcglnyt...nrqvgnlqlrkvncsevksileaqlnypsfsiydlgs....	659
P69C	pfedyipylcglnyt...nrqvgnlqlrkvncsevksiileaqlnypsfsicitelgs....	658
P69B	pfedyvpylcglkyt...dqvgvnlqrrvncsevksileaqlnypsfsifglgs....	658
Seq_ID_24	.....	398
CUSSP	nesdyvkflcgggyn...tqavrritgdysactsgntgrvwdlnypsfsflsvsps....	644
Seq_ID_19	.....	289
Seq_ID_18	tsqdyinllcaldft...sqqikaitrssayscsnss...ldlnypsfigyfnynssesd	668
Seq_ID_20	tpqdyinllcalnlt...seqiktitrss.ytcbnps...ldlnypsfiayfnvnsseld	593
SBT4	tpqdyinllcslnft...eeqfktfarssanyhncsn.psadlnypsfiayfysysqegny	682
SBT3	tpqdyvnlclsnft...eeqfktiarssas.hncsn.psadlnypsfiayfysiegnf	667
AG12	tpqdyinllcsmnyn...kaqilaivrsdsy..tcndpssdlnypsfiayfhns....tc	665
AIR3	gikdylnflcslgyn...asqisvfgsnftcsspk.islvnllypsitvpnlts....	687
Seq_ID_21	etsdyvnflcsigydgddvavfardssrvn.crserslatpgdlnypsfsfvvftge....	667
Seq_ID_22	etsdyvnflcsmaydgddvavfardssrvn.crserslatpgdlnypsfsfvvftge....	667
Seq_ID_23	dtkdyvdfldaigydpkrispfvkdtsvsn.cseknlvspgdlnypsfsfvvf.g....	672
MDC16.21	evkeyvafldaigyefpgilvflqdpdtydacetsklrtagdlnypsfsfvvf.a....	675
Seq_ID_27	tvddyinlflcaldy...spsmikviakrdiscnxnnkdielltlithllpflwkrawgeha	675
SBT1	tvddyinlflcaldy...spsmikviakrdiscnkeyrvadlnypsfsipmetawgeha	675
ARA12	ttedylgflcalnyt...sp.qirsvsrrnytcdpksysvadlnypsfaavnvdgv.g..a	672
Seq_ID_26	gaqdyfelfctqqls...psqltvfgkfsnrtchhslanpgdlnypaisavfpedakvs.	79
SBT2	gaqdyfelfctqels...psqlmvfgkfsnrtchhslanpgdlnypaisavfpektkls.	688
Seq_ID_28	qfkdyisylcglkytdr...qmgslqlrrtseskvksipeaqlnypsfsislgan....	257
F22M8.3	stvdylnylcslnytserillfsgtntcasnavvls..pgdlnypsfaavnlvng....	666
Seq_ID_29	dtstylnllcslnytekemklftnes....npcsgftgspldlnypsfsvmfrpd....	72
Consensus	dy l c l y c d l n y p s f	720

Seq_ID_40	.....	249
Seq_ID_39	.....	249
Seq_ID_25	.....h.....	398
P69D	.....tpqtytrtvtnvgdakssykeiv.spkgvvvkvepsalnfstlnqklyqvft	712
P69A	.....tpqtytrtvtnvgdakssykeiva.spealpskltr..anfssdqklyqvft	711
P69C	.....rlfertli.....	666
P69B	.....tpqtytrtvtnvgdatssykeiva.spegvaievepselnfsealnqklyqvft	712
Seq_ID_24	.....	398
CUSSP	...qtfnqyfnrtlttsvapqastyramis.apqgltisvnpn...vlsfnglgdrksftl	697
Seq_ID_19	.....	289
Seq_ID_18	...pkriqefqrtvtnvgegmsvytaklt.smgdykasvapdklvfkekyekqsyklrie	724
Seq_ID_20	...ptrvgefkrvtvtnvgegvsyetaelt.ampglkvsvvpcklvfkdkyekqsyklrie	649
SBT4	...pwleqkfrrtlttnvgkkgatykvkie.spknstisvspqtlvfknknekqsytltir	738
SBT3	...tlleqkfkrvtvtnvkgaatyaklkl.apknstisvspqilvfknknekqsytltir	723
AG12	...rrsvntfqrtvtnvgdgaatykatvt.apkdsrvivspqtlafgskyeqsyntlii	721
AIR3	.....skvtvsrtvknvgrp.smytvkvn.npqgvvyavkptslnftkvgeqtkfkvilv	740
Seq_ID_21	..sng.vvkykrvvnnvgkntdavyevkvnapssevevnpaklvfseekqslsyaislk	724
Seq_ID_22	..sng.vvkykrvvnnvgkntdavyevkvnapssevevnpaklvfseekqslsyaislk	724
Seq_ID_23	..sds.vvknkrvvknvgrntnavyevkinapgsvevkvtpklfsfeknkslsyaisfs	729
MDC16.21	..stgevvkykrvvknvgsnvdavyevgvkspanveidvpsklafskeksvleyevtfk	733
Seq_ID_27	nssaptvtrytrtlttnvgnpatykasvss.emqevkigvepqtltfsrkkekttyvtft	734
SBT1	dsstptvtrytrtlttnvgnpatykasvss.etqdvkilvepqtltfsrkkekttyvtft	734
ARA12	.....y.kytrtvtsvggagtysvkvt.ettgvkisvepavlfnfkeaneksyvtvtft	724
Seq_ID_26	.....tltlhrvtvtnvgspisnyhvrvs.pfkavvkvepsrlnftskhqklsykwife	132
SBT2	.....mltltlhrvtvtnvgspisnyhvvs.afkgavvkveperlnftsknqklsykvtfk	741
Seq_ID_28	.....qqtytrtvtnvgeamssyrvkivs.pqnvsvvvkpstlftklngklytrvtf	310
F22M8.3	..anlktvrykrtvtnvgsptceymvhve.epkgvkvrvpckvlfkqkarerlsytvt	723
Seq_ID_29	..ssvhvkrtrtlthvavkpevykvkilnlnsekvslsismelmfneslrkqymvkfe	130
Consensus	rtvtnvg y p v p l f k y	780
Seq_ID_40	.....	249
Seq_ID_39	.....	249
Seq_ID_25	.....	398
P69D	kttnis.....ttsdvegflkwnsnrhsvrspiavrsvae.....	747
P69A	ktanss.....nteviegflkwtsnrhsvrspiallliq.....	745
P69C	.....	666
P69B	kttnss.....npeviegflkwtsnrhsvrspiavvsa.....	745
Seq_ID_24	.....	398
CUSSP	tvrgsi.....kgfvvsaslvwsdgvhvrsplititslv.....	731
Seq_ID_19	.....	289
Seq_ID_18	gpll.....diilfmvl.....	737
Seq_ID_20	cpqlmn.....dflvhgslswvekggkyvvrsprivatns.....	683
SBT4	yrgdfn.....sgqtgsitwvekngrsvrspiplttdlwgad.....	779
SBT3	yigdegq.....srnvgsitwveqngnhsvrspiivtspiiev.....	761
AG12	nfttrdk...rkdisfgalvwanengkhnsvrspiivvsplind.....	761
AIR3	ksgn.....vakgyvfgelvwskkhrsvrspiivkl.....	772
Seq_ID_21	skks.gdlqmvkgiesafgsiewsdgihnvrspiavwrhysdaasm.....	770
Seq_ID_22	skks.gdlqmvkgiesafgsiewsdgihnvrspiavwrhysdaasm.....	770
Seq_ID_23	sngsvg.lervkglesafgsiewsdgihnvrspiavhllhsatesq.....	775
MDC16.21	svlvggvgsvpghe..fgsiewtdgehvkvspvavqwgqgs.vqsf.....	777
Seq_ID_27	a.ss.....kpsgtts.farlewsdgqhvaspiafswt.....	766
SBT1	a.ts.....kpsgtts.farlewsdgqhvaspiafswt.....	766
ARA12	vdss.....kpsgsns.fgsiewsdgkhvvgspvaiswt.....	757
Seq_ID_26	tkyr.....qkare..fgsllwkdgthkvrstivitwlasl.....	166
SBT2	tvsvr.....qkape..fgsliwkdgthkvrspiavilqehetped.....	775
Seq_ID_28	tttn.....itnmevvhgykwtssdkhfvrspiavilqehetped.....	350
F22M8.3	aeasrn.....ssssfgvlvwicdkynvrspiavtwe.....	756
Seq_ID_29	shhifnss.rkiaeqmafgsiswesekhnvrspfavmwvqqnfnnrlykit	181
Consensus	g w g h vrs pia	840

TMV-SeqID 3 (-)

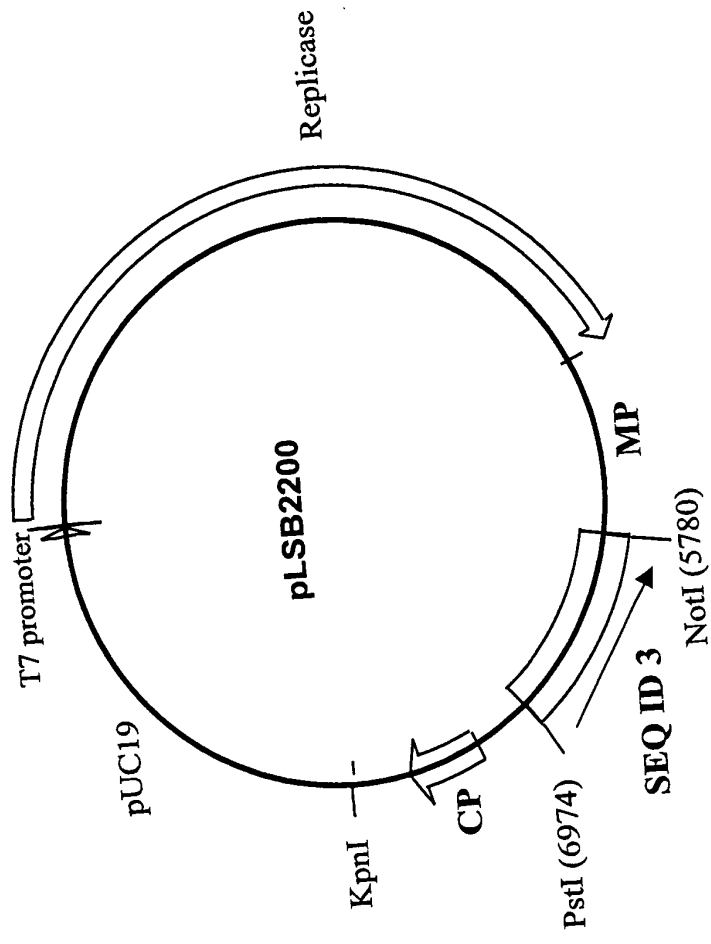


Figure 12A.

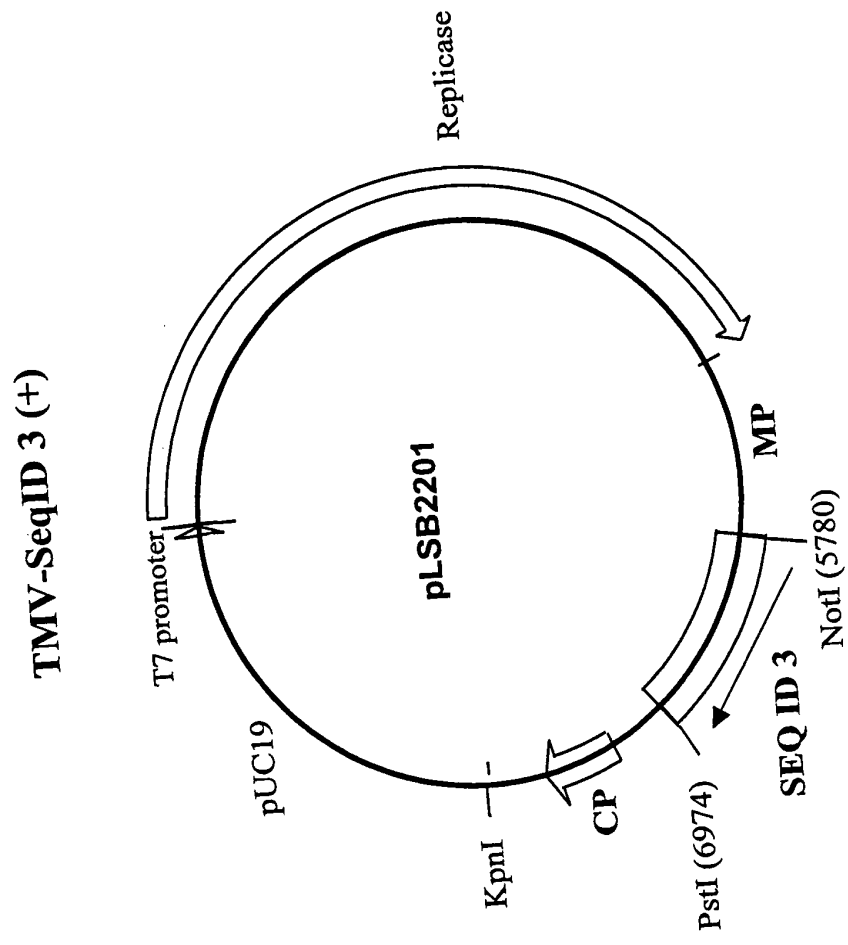


Figure 12B.



Figure 13.

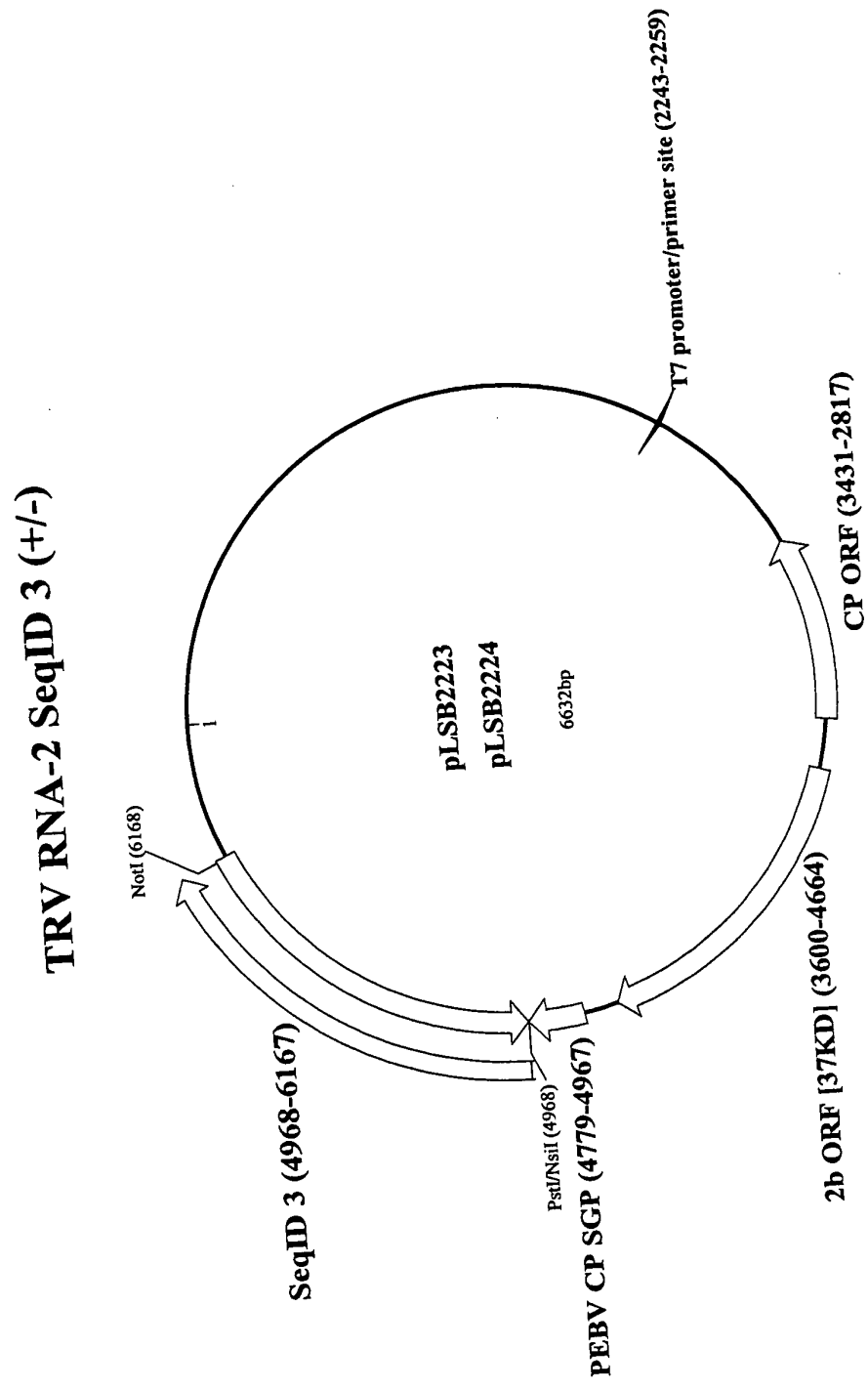


Figure 14.

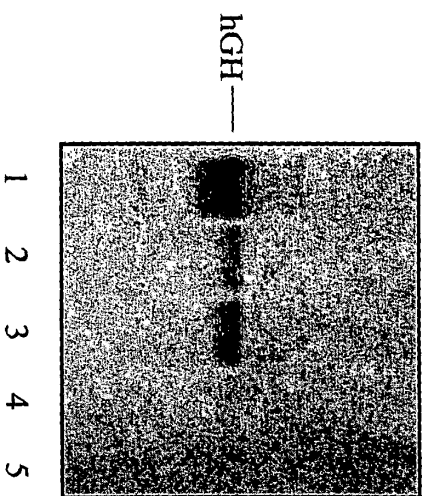


Figure 15.

Figure 16A

Seq_ID_17	.....	0
Seq_ID_7	.....	0
Seq_ID_11	.....	0
Seq_ID_14	.....	0
Seq_ID_15	.....	0
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	gctagcaccccaacccctctctaccaaaggaaagaaactcttccctttcagtagagaact	60
Seq_ID_5	.....	0
Seq_ID_8	.....	0
Seq_ID_16	.....	0
Seq_ID_13	.....	0
Seq_ID_12	.....	0
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		
Seq_ID_17	GGCCAATTGTATTACTATGTATTTCTTGCTCCTTACTATCTTATTACTTACTCTAAATCC	60
Seq_ID_7	.....	0
Seq_ID_11	.....	0
Seq_ID_14	.....	0
Seq_ID_15	.....	0
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	tcCattTTcTggTtacctGacacTgagaacCgcaAaaAgaTggcaAgaccCgggggcatg	120
Seq_ID_5	.....ccCacGCgtCcggtTtTtccATTctTTttcaTtAtTa.	37
Seq_ID_8	.....gtTtTtccATTctTTttcaTtAtTa.	25
Seq_ID_16	.....CacttTCtTcgtctTCTTcTTctTTctcCctctTaa	36
Seq_ID_13	.....	0
Seq_ID_12	.....	0
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		
Seq_ID_17	ATTAACATATGGCAGAGTCAGAAACTTATATCATCCATATGGACTTATCAGCCATGCCTAA	120
Seq_ID_7	.....	0
Seq_ID_11	.....	0
Seq_ID_14	.....	0
Seq_ID_15	.....G.....	1
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	gTTcttTcaacactAtTCctAAtgTTgTtTCATgtgTtTGttCaTgcagGCCAgaaCcAg	180
Seq_ID_5	tcTcttTcTGcCtcAcTCcGgtgaccAttTCcgtCcaATccgaTggTCatgaAacttTcA	97
Seq_ID_8	tcTcttTcTGcCtcAcTCcGgtgaccAttTCcgtCcaATccgaTggTCatgaAacttTcA	85
Seq_ID_16	tcTtctTcTttCtcAactctttAgTaAttTCAGtCcaAtTgGacggTCAtaaAacttTcA	96
Seq_ID_13	.....	0
Seq_ID_12	.....	0
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		

Seq_ID_17	AGCTTTTTCTAGCCATCAGAATTGGTACTTGACCACTCTTGCTTCTGTATCAGGTAGTTC	180
Seq_ID_7	.....	0
Seq_ID_11	.....	0
Seq_ID_14	.....	0
Seq_ID_15	.....	1
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	AaaaagactTAcataatttAcaTGacaagtCaACataacctgctgaTtTtgatgAtcaC	240
Seq_ID_5	tcaTTcacgTttCCAaatccgaTaagcCccGtggtttTCaccaccCaccAcCAttggtact	157
Seq_ID_8	tcaTTcacgTttCCAaatccgaTaagcCccGtggtttTCaccaccCaccAcCAttggtact	145
Seq_ID_16	tagTcacgTgtCCAatcccaTaagcCccacatctTtactaccCgccAaCAttggtact	156
Seq_ID_13	.....	0
Seq_ID_12	.....	0
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		
Seq_ID_17	AAGTCTTGGAAGTAAAGTAATAGAAATTCCTTTTCCTCATCAAACTA..GTATATGCT	238
Seq_ID_7	.....	0
Seq_ID_11	.....ACcc..cTcgAccna	13
Seq_ID_14	.....	0
Seq_ID_15	.....	1
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	ActctgTGGtAtgactcaTctTtaAAGTcagTaTcCaaaggCgccAacAtgcTtTacaCc	300
Seq_ID_5	cctcCaTcatcCgatccGT.....ttcccaaCaCcttctAaaAtccTcTacaCc	207
Seq_ID_8	cctcCaTcatcCgatccGT.....ttcccaaCaCcttctAaaAtccTcTacaCc	195
Seq_ID_16	cctcCaTcctcCgatcAGTctcttct.TcttcccaaCaCtctgccAaaAtccTtTactCT	215
Seq_ID_13	.....	0
Seq_ID_12	.....	0
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		
Seq_ID_17	TACACTAACGCTATTCATGGTTTTAGTGCAACTCTTCTCCTTCTGAGCTACAAGTTATA	298
Seq_ID_7	.....	0
Seq_ID_11	cgCgncngC.CcAcgCgTccgcccAcgcgtcCgCTTCTCCTTCcGAGtacaAAGccATc	72
Seq_ID_14	.....	0
Seq_ID_15	.....	1
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	TACAacAAtGtcATcCATGGcTactcaaCacagCTaaCagCTgaTGAagccaAAtcTcTt	360
Seq_ID_5	TAtgaacgtGCcgccgtgGGcTTctcTGCACgcCTcaCagCcgCTcAGgccgAtcagcTc	267
Seq_ID_8	TAtgaacgtGCcgccgtgGGcTTctcTGCACgcCTcaCagCcgCTcAGgccgAtcagcTc	255
Seq_ID_16	TACgaTtAtGCTgccCgTGGTTTctcTGCcgcTCTcaCTtCcgggcAGgctgAccggcTc	275
Seq_ID_13	.....	0
Seq_ID_12	.....	0
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		

Seq_ID_17	AAAAATTCTCCAGGCTATCTTTCTTCAACTAAGGACATGACAGTTAAAAATTGACACGACA	358
Seq_ID_7	.....	0
Seq_ID_11	AAgAATTCTCtAGGgTATgTTTCTTCgAtggAGGACAgGACAGTTAAAAATTcACACGACc	132
Seq_ID_14	.....	0
Seq_ID_15	.....	1
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	gAAcAgcaaCCtGGaatTCTcTCggtccaTgAGGAagTGAgAtacgAgcTTcAtACcACT	420
Seq_ID_5	cgccgTatTCCcGGtgtaaTcTCcgtcctTcccGACgaagtAcgccAtcTccACACcACc	327
Seq_ID_8	cgccgTatTCCcGGtgtaaTcTCcgtcctTcccGACgaagtAcgccAtcTccACACcACc	315
Seq_ID_16	cgccgcatgCCtGGCgtggTcTCcgtcgtacctGACcgtgCacgTcAgcTTcACACcACT	335
Seq_ID_13	.....	0
Seq_ID_12	.....	0
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		
Seq_ID_17	CACACGTCTCAATTCCCTTGGCCTAAATTCCGATTCTGGTGCATGG..CCAAAGTCAGACT	416
Seq_ID_7	.....	0
Seq_ID_11	CAttCaTCCaTtTCCTTGGCCTAAgCTCaatgTaTGGTtCATGG..CCAAAGTCaAACT	190
Seq_ID_14	.....	0
Seq_ID_15	.....	1
Seq_ID_4	.....	0
Seq_ID_3	.....	0
Seq_ID_10	CgatCccCTacATTtCTgGGACTtgAaggacgTgaaaGTaaATcattCtttctTCAagCT	480
Seq_ID_5	CAtACccCTaccTTCTgGGACTtgcTgaCtcTTtcGGccttTGG..CCcAAcTCCgATt	385
Seq_ID_8	CAtACccCTaccTTCTgGGACTtgcTgaCtcTTtcGGccttTGG..CCcAAcTCCgATt	373
Seq_ID_16	CACACacCgaccTTCTaGGCCTcgcagattcaTtTGGgcttTGG..CCcAAcTCCgATt	393
Seq_ID_13	.....	0
Seq_ID_12	.....ctCcgAtcgaaatcctaAGTctAaattgCCAgtTtgctag	41
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus		
Seq_ID_17	ATGGCAAA...GATGTTATAGTTGGATTAGTTGACACA.GGGATTtGGCCAGAGAGTAA	471
Seq_ID_7	.....t.GGTATcaacgCAGAGtGccA	21
Seq_ID_11	ATGGCAAA...GgTGTTATcaTTGGtgTAGTTGAtACA.GGGgTTTGGCCAGAGAtTAA	245
Seq_ID_14	.....GgcGTgATtaTcGGAgTtaTaGACACT.GGaATTgttCCTGAccaTcc	47
Seq_ID_15	.....GgcGTgATtaTcGGAgTtaTaGACACT.GGaATTgttCCTGAccaTcc	48
Seq_ID_4	.....GgcGTgATtaTcGGAgTtaTaGACACT.GGaATTgttCCTGAccaTcc	47
Seq_ID_3	.....GgcGTgATtaTcGGAgTtaTaGACACT.GGaATTTtcCCTGAccaTcc	47
Seq_ID_10	gaaaCAAggagtGAGGTcATtaTTGGtgTgcTgGACACT.GGtgTTTGGCCTGAatcaAA	539
Seq_ID_5	AcGctgAt...GATGTcATcGTcGGAgTtcTgGACACg.GGtATaTGGCCgGAaAGacc	440
Seq_ID_8	AcGctgAt...GATGTcATcGTcGGAgTtcTgGACACg.GGtATaTGGCCgGAaAGacc	428
Seq_ID_16	AcGctgAt...GAcGTcATcGTcGGggTgcTcGACACg.GGcATTtGGCCcGAaAGgcc	448
Seq_ID_13	.....	0
Seq_ID_12	AgccagAAatctctcaagtgccccGaAgcctTgagCgCgaGGtgccTGGCcttAatcagA	101
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus	g gt at t ggagt t gacac gg attt cc ga c	

Conserved Region A

Seq_ID_17	AAGCTAT.AATGATAATGGGATGACTGAAGTTCCATCAAGATGGAAAGGAGAATGTGAAA	530
Seq_ID_7	ttACggccggyGATgATGGGATTAgTGAAGTACCATCAAGATGGAAAGGAGAATGTGAAA	81
Seq_ID_11	AAGCTtT.gATGATgATGGGATGAgccAAGTTCCATCAAGgTGGAAAGGAatATGTcAAA	304
Seq_ID_14	ttcaTtT.AgcGAcgtTGGGATGcCTcctccgCCTgCtAaATGGAAAGGAtttTGTGAgT	106
Seq_ID_15	ttcaTtT.AgcGAcgtTGGGATGcCTcctccgCCTgCtAaATGGAAAGGAtttTGTGAgT	107
Seq_ID_4	ttcaTtT.AgcGAcgtTGGGATGcCTcctccgCCTgCtAaATGGAAAGGAtttTGTGAgT	106
Seq_ID_3	ttcaTtT.AgcGAcgtTGGGATGtCTcccccgCCTgCtAagTGGAAAGGAtttTGTGAgT	106
Seq_ID_10	AAGtTtT.gATGAcAcTGGAcTaggTccAGTcCCTatgAGcTGGAAgGGtGAGTgccAAA	598
Seq_ID_5	gAGtTtT.tccGAcgAgGGtCtctCTacgGTTTCCTCAAGtTGGAAAGGgaAGTgcGttA	499
Seq_ID_8	gAGtTtT.tccGAcgAgGGtCtctCTacgGTTTCCTCAAGtTGGAAAGGgaAGTgcGttA	487
Seq_ID_16	gAGCTtT.tccGAcggcGGGcTttCTGcAGTcCCTTCcgGtTGGAAAGGAaAATGcGAAA	507
Seq_ID_13	.....	0
Seq_ID_12	AAGCTtT.AtTGATgAaGaAtTGggaccAaTTCATCtAagTGGAgAGGgattTaccAAA	160
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus	ttt gacg tggg t ct c t cct c a tggaaagga tg ga a	
Conserved Region A		

Seq_ID_17	GTGGAACtCAATTtAATTCCTCTTTATGCAACAAGAAACTCATtGGTGCgCGTTACTTCA	590
Seq_ID_7	GTGGtACTgAgTTcAATTCCTCTTTgTgTAACAAGAAgCTCATtGGcGcTCGTTACTTCA	141
Seq_ID_11	cTGGcACTCAgTTAATTCTcATtTgTGCAACAAGAAACTCATcGGaGcTCGTTACTTCA	364
Seq_ID_14	cTaatttcacgaccAA.....gTGtAACAACAAACTCATtGGaGCcAGgTctTTC.	156
Seq_ID_15	cTaatttcacgaccAA.....gTGtAACAACAAACTCATtGGaGCcAGgTctTTC.	157
Seq_ID_4	cTaatttcacgaccAA.....gcGtAACAACAAACTCATtGGaGCcAGgTctTTC.	156
Seq_ID_3	ccaatttcacgacaAA.....gTGtAATAACAAGaTCATaGGactcaGgTctTtT.	156
Seq_ID_10	tTGGcAagaAcTtCAAgCaTcaagcTGtAACcgGAAACTCATtGGTGCaaGgTtctTCT	658
Seq_ID_5	cTGGAcCTgAtTTTccTgaaaCcTcATgTAAaAAAAaTCATaGGcGCtCaaatgTTtt	559
Seq_ID_8	cTGGAcCTgAtTTTccTgaaaCcTcATgTAAaAAAAaTCATaGGcGCtCaaatgTTtt	547
Seq_ID_16	cTGGgctggAcTTTccTgCaaCTTcATgTAACcgTAAAaTCATcGGTGCTCGAtTgTTtt	567
Seq_ID_13	.....	0
Seq_ID_12	aTaattCTgAtcacAcc...TtTTagTGCAAAAgGAAGCTaATTGGaGCaaGgTACTTCA	217
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus	ct a aa tgtaacaa aaactcat gg gc g t ttc	

Seq_ID_17	ACAAAGG.....CCTAATTGCCAATA...ATCCGAATATTACCATCTCGATGAATTcAG	641
Seq_ID_7	AtAAAGG.....CCTAcTTGCCAAcA...ATCCaAATcTTAatAtttCAATGAATTCTt	192
Seq_ID_11	AtAAAGG.....aCTAcTTtCTAAag...tgaaaAATcTTACCATCatGATaAATTCTg	415
Seq_ID_14	.....CcgcT...tgAc.....AATggtc	172
Seq_ID_15	.....CcgcT...tgAc.....AATggtc	173
Seq_ID_4	.....CcgcT...tgAc.....AATggtc	172
Seq_ID_3	.....CgAtTatCtgAa.....gATaCcc	175
Seq_ID_10	cacAAGGttatgaagcAgcTttCgggg...caattgATgagACCAcagaatccAAGTCAC	715
Seq_ID_5	ACAAAGGgtatgaagctAaacatgg...cccaatGgATgaatCaAaagaatcaAAaTCgc	616
Seq_ID_8	ACAAAGGgtatgaagctAaacatgg...cccaatGgATgaatCaAaagaatcaAAaTCgc	604
Seq_ID_16	ACAAAGGttacgaagctgaTcgtggaAgcccaattgAcgaatCtAaagaatctAAaTCgc	627
Seq_ID_13	.....	0
Seq_ID_12	ACgAAGGatacgtgactcTaGCaAgat.....cTcTcAattcaagttTctAcaCAC	268
Seq_ID_9	.....	0
Seq_ID_6	.....	0
Consensus	aagg c t tg aa c c	

Seq_ID_17	CTCGTGACACTGATGGGCATGGAACCTCACACATCCTCTACAGCTGCAGGAAGTCATGTAG	701
Seq_ID_7	CTaGaGAtACcGATGGaCATGGAACCTCACACTTCTTCTACAGCTGCgGGAAGTtATGTTg	252
Seq_ID_11	CcCGTGAtACaGAgGGaCATGGAACCTCaTActTCTCTACAGCTGCtGGAAGTctTGTAa	475
Seq_ID_14	CcataGAtgaaaATGGaCATGGtACgCatACAgCaagcACAGCTGCAGGAgccttTGTga	232
Seq_ID_15	CcataGAtgaaaATGGaCATGGtACgCatACAgCaagcACAGCTGCAGGAgccttTGTga	233
Seq_ID_4	CcataGAtgaaaATGGaCATGGtACgCatACAgCaagcACAGCTGCAGGAgccttTGTga	232
Seq_ID_3	CgataGAtACTGATGGaCATGGtACaCACACTgCtagcACAGCTGCAGGAgcTttTGTga	235
Seq_ID_10	CaaGgGACgaTGATGGcCATGGgACaCACACTgCaaCTACAGCaGctGGctcggtTGTAa	775
Seq_ID_5	CaaGaGAtACTGAaGGaCATGGAACaCatACAgCaTcaACAGCaGctGGttcTttaGTgG	676
Seq_ID_8	CaaGaGAtACTGAaGGaCATGGAACanAtACAgCaTcaACAGCaGctGGttcTttaGTgG	664
Seq_ID_16	CaaGaGAtACTGAaGGaCATGGgACTCACACTgCtTcaActGCaGctGGatcTgtTGTAG	687
Seq_ID_13	.....	0
Seq_ID_12	CaCGaGACACTGATGGaCATGtttCcCACACgcagTtcAagGaTcaAGtggtTcccGgta	328
Seq_ID_9	.....	0
Seq_ID_6	.....ggCCatTACgGCCGggcacgtgaATcctG	29
Consensus	c agagatac gatggacatgg ac ca ac gc acagctgc gga ct ttgt	

Conserved Region B

Seq_ID_17	AATCTGCATCTTATTTTGGCTATGCGCGTGGTTCTGCTACAGGGATGGCACCAAGGCTC	761
Seq_ID_7	AgggTGcATCTTATTTTGGCTATGcCaccGGTaCTGCTAttGGcATaGcGccAAAGGCTC	312
Seq_ID_11	AgggTGcGtCTTATTTTGGCTATGcCcCtTGGTtTGCaAtAGGcgTcGCACCAAtGGCTC	535
Seq_ID_14	AAGgTGcTaaTgtaTTTGGgaATGcCaaTGGaaCaGcagttGGtgTtGCCcCctcttGCgt	292
Seq_ID_15	AAGgTGcTaaTgtaTTTGGgaATGcCaaTGGaaCaGcagttGGtgTtGCCcCctcttGCgt	293
Seq_ID_4	AAGgTGcTaaTgtaTTTGGgaATGcCaaTGGaaCaGcagttGGtgTtGCCcCctcttGCgt	292
Seq_ID_3	AAGgTGcCaaTTtctTTTGtaATGcCaaTGGcaCaGcagttGGtgTtGCCcCctcttGCcC	295
Seq_ID_10	cgggaGcTagcctcTTTGGtTATGcTgctTGGcaCaGcagttGGGATGGcTtCACAtGCaa	835
Seq_ID_5	cAaaTGcTagcTtTTaccaaTATGcCaaaGGT.....ATGGctatAAAAGCaa	724
Seq_ID_8	cAaaTGcTagcTtTTaccaaTATGcCaaaGGTgaaGCTAGAGGtATGGctatAAAAGCaa	724
Seq_ID_16	ctaacGcTagTtTTTcaATacGCaaaGGTgaaGCTAGAGGcATGGctgtgAAAGCTC	747
Seq_ID_13	.....	0
Seq_ID_12	tggaaa.....TGGaacaGCaaagGGTggatCacCAaaagTaagAgtAgcaGCTt	378
Seq_ID_9	.....cccaCgcgtCcgaTGGTgCaG.gACAcAtAaatCcaCgAAaagct	44
Seq_ID_6	AATCgCtatTgATccgGGCctaataTatGacaCTG..AtAcatcaGaCtaCatcaaCct	87
Consensus	aag tgcta t t tttgg atgccaatggt cagc gg t gc ca gc	

Conserved Region B

Seq_ID_17	ATGTGGCAATGTACAAGGCTTTGTGGGAAGAAG...GTACAATGTTATCTGATATTCTGG	818
Seq_ID_7	ATGTGGctATGTACAAGGCTcTaTGGGAAGAAG...GTgtAtacTTgTCTGATgTTCTtG	369
Seq_ID_11	ATGTGGctgTGTACAAGGCTcTcTGGGAtGggG...ccggtAccaTtTCTGATATTCTtG	592
Seq_ID_14	AcaTaGcCaTaTaTaAAGGtaTgCGGttctGATGgcgtTtgttctgatgtTGAaATTtTaG	352
Seq_ID_15	AcaTaGcCaTaTaTaAAGGtaTgCGGttctGATGgcgtTtgttctgatgtTGAaATTtTaG	353
Seq_ID_4	AcaTaGcCaTaTaTaAAGGtaTgCGGttctGATGgcgtTtgttctgatgtTGAaATTtTaG	352
Seq_ID_3	AcaTGGCcATaTaTaAAGGtaTgcaGttttGcta...cTtgtAgtgaAaCTGATgCtTtTaG	352
Seq_ID_10	gaGTGGCtgcaTATAAAGtaTgtTGGGctGgAG...GatgttTtagcagcGACATaCTaG	892
Seq_ID_5	gaaTaGcCgctTACAAGatTTgCTGGaAAaAtG...GctgttTtaatTCTGATATatTGG	781
Seq_ID_8	gaaTaGcCgctTACAAGatTTgCTGGaAAaAtG...GctgttTtaatTCTGATATatTGG	781
Seq_ID_16	gaaTaGCAGctTAtAAGatcTgtTGGaAAacAG...GgtgttTtgatTCTGATATTtTaG	804
Seq_ID_13	.....	0
Seq_ID_12	AcagaGtttgcTggcctcCaaTtatGGgcagtG...GgtgctTtgatTCaGATATctTGG	435
Seq_ID_9	gTtgacCctgGtttgggtttTgacataggGgcGcagGattAcTtgcAatTccTATgCaca	104
Seq_ID_6	ActatGCagctTgaActaCacaGaGaaAgaAatgaaacttttcacgAaCgagTcaaaTcc	147
Consensus	a atagc ta aaggtatg gg ga g g tggt t at ctgatatttt g	

Conserved Region B

Seq_ID_17	CTGCAATTGATCAGGCAATTGAGGATGGAGT..GGATATAATATCCTTATCATTAGGCAT	876
Seq_ID_7	CTGCAATTGATCAaGCAATTacaGATGGTGT..GGATgTctTATCCTTgTCgTTAGGCAT	427
Seq_ID_11	CTGCAATgGATCAGGCAATTGcGGATGGttg..tGATATctTATCCTTgTCATTTGGCgc	650
Seq_ID_14	CTGCgATgGATgtaGctATTGatGATGGcGT..aGATATtcTATCaaTATCccTtGGtgg	410
Seq_ID_15	CTGCgATgGATgtaGctATTGatGATGGcGT..aGATATtcTATCaaTATCccTtGGtgg	411
Seq_ID_4	CTGCgATgGATgtaGctATTGatGATGGcGT..aGATATtcTATCaaTATCccTtGGtgg	410
Seq_ID_3	CTGCcATgGATgcaGctATaGatGATGGTGT..aGATATcAttTCCgcATCtcTAGGCgg	410
Seq_ID_10	CaGggATgGATCAGGcCgTcataGATGGTGT..aaATgTAcTcTCacTgTCccTtGGtgg	950
Seq_ID_5	CTGCcATgGATCAaGctgTTGatGATGGTGT..GcATgTgATcTCacTtTctgTtGGggc	839
Seq_ID_8	CTGCcATgGATCAaGctgTTGatGATGGTGT..GcATgTgATcTCacTtTctgTtGGggc	839
Seq_ID_16	CTGCAATgGATCAaGctgTTGctGATGGAGT..tcAcgTgAttTCtcTtTCcgTtGGCgc	862
Seq_ID_13	.....	0
Seq_ID_12	tTGcTtTTGATtTGGtAATTGatGATGGcGT..GGAcgTgcTtTCagTcTCacTtGGagg	493
Seq_ID_9	CaaCAAcTcAgCccttcAcaGetaAcaGttTttGGAAAgttctcCaacAgaAcTtGcCAT	164
Seq_ID_6	tTGctcggGtTttactggaTctccActtgaTcttaActatccATCacTtTctgTtatgtT	207
Consensus	ctgc atggatc agc attgatgatgg gt gat t t tca t tc ttgg g	
Seq_ID_17	AGATGATC...TTGCTTTATATG.....AGGATCCGGTAGCTATTGCCACATTTGCA	925
Seq_ID_7	AGAcGcga...TTcCacTAcAcG.....AaGATCCTGTgGCaATTGCCgCATTTGCT	476
Seq_ID_11	AGtTtcTCcatTccCTcTATATa.....taGATCCTaTctCTATTGCTtCATTTtCt	702
Seq_ID_14	AacTagTaa...TcCgTTccATa.....AtGAcAaGaTtGCTcTTGgggCgTaTagt	459
Seq_ID_15	AacTagTaa...TcCgTTccATa.....AtGAcAaGaTtGCTcTTGgggCgTaTagt	460
Seq_ID_4	AacTagTaa...TcCgTTccATa.....AtGAcAaGaTtGCTcTTGgggCgTaTagt	459
Seq_ID_3	AttTAcTaacgcTcCaTTAcATG.....AtGAcCCTaTtTcTcTTGgCgCgTacagt	462
Seq_ID_10	cacaatTtc...TGaTTatTAcA.....gGGATataGTAGCaATTGgaggATTTtCt	999
Seq_ID_5	taAcGgTtatgcTcCacatTATctgt....AtGATtCtaTtGCaATTGgagCtTTTGgt	894
Seq_ID_8	taAcGgTtatgcTcCacatTATctgt....AtGATtCtaTtGCaATTGgagCtTTTGgt	894
Seq_ID_16	tGAcGgTtatgcacCggaATATGatg.....cGGATtCtaTtGCTATTGgagCtTTTGgt	917
Seq_ID_13	.....	0
Seq_ID_12	AGATacTg.....gagcATATGtca....AtGActCtGTAGCTATTGgttCATTTcat	542
Seq_ID_9	cacTcgctt.gcTaaTccAgggGact....tGaActaccccGcCATtTctgCAGTTttt	218
Seq_ID_6	caggccTgattcctCTgTtCATGttgttaagAGGAcattaacaCatgTcgCggtTTctaA	267
Consensus	aa t t a tcc t at a ga ctat gctattgg gc ttt t	
Seq_ID_17	GCAATGGAGAAAGATATATTTGTTTCCACTTCAGCTGGAAATGAAGGGCCTGACGATCAG	985
Seq_ID_7	GCAATGGAGAAAGgTATATTTGTTTCCACcTcTGCaGGAAATGAAGGGCCTtAttATgAG	536
Seq_ID_11	GCAATGGAGAAAGgcATATTTGTTTCCgtTTCAGCTGGAAATGAAGGGCCTtCGATCAa	762
Seq_ID_14	GCAAcAGaaAgAGgTATtcTTGTTagttgTTCtGCaGGcAATagTGGtCCattCcAaCgc	519
Seq_ID_15	GCAAcAGaaAgAGgTATtcTTGTTagttgTTCtGCaGGcAATagTGGtCCattCcAaCgc	520
Seq_ID_4	GCAAcAGaaAgAGgTATtcTTGTTagttgTTCtGCaGGcAATagTGGtCCattCcAaCgc	519
Seq_ID_3	GCAAcAGaaAAAGgTATtcTnGcTagtgCcTcTGCaGGcAATagcGa...gtttGATaAc	519
Seq_ID_10	GCAGcttctcAAGGaATcTTcGTcTCgtgcTCgGCTGGgAATGgcGGGCCaGcCtcTgga	1059
Seq_ID_5	GCAAtcTGAacAtGgcgTccTcGTcTCatgTTCAGCTGGAAATtctGGtCCcGgaGcTtAt	954
Seq_ID_8	GCAAtcTGAacAtGgcgTccTcGTcTCatgTTCAGCTGGAAATtctGGtCCcGgaGcTtAt	954
Seq_ID_16	GCTtcaGAacAtGgcgTtgTTGtTcTctgTcTcTGTGGAAActccGGtCCcGgtGcTtcc	977
Seq_ID_13	.....	0
Seq_ID_12	GttgTtaAGcAcGgcATTgTTGTcgttACcTcTcTGTGGtAAActcgtcctggtcCcggtAc	602
Seq_ID_9	cCtgaAGa.cgcaAAgTtTcaacgCtgacgCttCacagAACagtcacCaatgtGggttc	277
Seq_ID_6	GCctgaGgtgtAcAaAgtaaaGaTaCtgaaTcTgaattctgaaAAGGttagtttaAgtAt	327
Consensus	gca c ga aagg att ttgtt ct tctgc gg aat gg cc t at a	

Seq_ID_17	GCTTTGCACAACGGAACACCTTGGGTTCTAACTGTTGCTGCTGGCACAGTTGATCGCGAA	1045
Seq_ID_7	aCTTTGCACAAtGGAACACCTTGGGtgTAACTGTTGCaGCTGGCACAGTTGACCGCGAA	596
Seq_ID_11	tCTTTGagCAAtGaggCACCTTGGtTTCTctCTGTTGCTGCTaGCACAGTTGATCGgGAc	822
Seq_ID_14	aCTgTagACAAtGacgCcCCTTGGaTTCTcACaGTTGgcGCTaGCACtcaTGATaGaaAA	579
Seq_ID_15	aCTgTagACAAtGacgCcCCTTGGaTTCTcACaGTTGgcGCTaGCACtcaTGATaGaaAA	580
Seq_ID_4	aCTgTaaACAAtGacgCcCCTTGGaTTCTcACaGTTGgcGCTaGCACtcaTGATaGaaAA	579
Seq_ID_3	cCTgTagcaAAtaatgCcCCTTGGaTTCTcACaGTTGgcGCTaGCACccaTGATaGaaAA	579
Seq_ID_10	tCccTctcCAACGctgCACCaTGGaTaactACTGTaGgTGCgGGgACcaTgGacCGCGAA	1119
Seq_ID_5	aCggcagtgAACattgCcCCgTGGaTgCTcACTGTTGgTGCatcaACtaTaGATCGtGAg	1014
Seq_ID_8	aCggcagtgAACattgCcCCgTGGaTgCTcACTGTTGgTGCatcaACtaTaGATCGtGAg	1014
Seq_ID_16	aCgcgGgtCAACGttgCgCCgTGGaTTCTcACcGTTGCTGCTtcaACgaTaGacCGgGAg	1037
Seq_ID_13	.....	0
Seq_ID_12	aaTacGaAaAA.attgCACCTTGGcTcaTAACTGTTGgcGCgaGaACtaTgGATtGtcAg	661
Seq_ID_9	tCcaatatCAAattACCAtgTTaGagTCTcgCcGTTcaaaggtGCagtcgTGAagGttgA	337
Seq_ID_6	aagcccaAtggaGctgatgtTcaatgaaTcttTaagGaaaCaaaggtAataTGgTCA..AA	385
Consensus	act t caa g gc ccttggattctcactgttgg gct gcac ttgatcg aa	
Seq_ID_17	TTTATCGGGACACTAAGTCTGGGTAATGGAGTTTCAGTCACTGGTTTATCTCTCTACC..	1103
Seq_ID_7	TTTATtGGaACAtTAActCTtGGaAATGGAGTTTCAGTCcCTGGTTTATCgCTaTACC..	654
Seq_ID_11	gTTATCaGGAtAtTAActCTtGGTAATGGAGTTTCAGTCACTGGTTTATCTCTCTACC..	880
Seq_ID_14	cTaAagGccActgTtAagCTtGGaAATaaAGaagaAtTtgaaGGagaATCTgctTatCat	639
Seq_ID_15	cTaAagGccActgTtAagCTtGGaAATaaAGaagaAtTtgaaGGagaATCTgctTatCat	640
Seq_ID_4	cTaAagGccActgTtAagCTtGGaAATaaAGaagaAtTtgaaGGagaATCTgctTatCat	639
Seq_ID_3	cTaAaaGccACcgTtAagCTtGGaAATaaAGaggaAtTtgaaGGagaATCTgctgAtCag	639
Seq_ID_10	TTcccaGcatataTtAGcCTtGGaAATGGAAAAaAtTCAGTGGagTATCaCtTACagt	1179
Seq_ID_5	TTcccgGcagatgTtAtTtTaGGagATAatagaatAtTtggTGGTgTtTCatTgTACTcc	1074
Seq_ID_8	TTcccgGcagatgTtAtTtTaGGagATAatagaatAtTtggTGGTgTtTCatTgTACTcc	1074
Seq_ID_16	TTTccgGctgatgTtAtTtTaGGagATGGcagaatAtTCggTGGcgTATCCtTgTattcc	1097
Seq_ID_13	.....	0
Seq_ID_12	TTTccCaGctataTcAtTtTaGGaAAcaaAaagcagtaCAaTt.TgaAaCaCTgccCaaa	720
Seq_ID_9	gccATCaagAttgAAttTCaccagcAaacAccagaAactAtcttacaAggTgatTttCga	397
Seq_ID_6	TTTgagaGccatCatAtatTcaacAgcaGcaggaaAaTagCTGagcaAatggcgTttgggt	445
Consensus	tt a gc a tgтта tct ggaaata a a aatt g tgg g atc t ta c	
Seq_ID_17	.CCGGGAATTCCAGTTCAAGCGAAAGCTCCATCGTTTTTCTCAAGAC...ATGCCTAGA	1158
Seq_ID_7	.CtGGGAATTCTAGTTCAAGCGAAAGCTCCcTtGTcTaTgTCgA.....ATGCCaAGA	706
Seq_ID_11	.CtGGGAATTCTA...CAAGCGAtAttTCTgTtaTtCTTgTCAAGAA...tTGCTTAGA	932
Seq_ID_14	cCaaaGAcTTCaAacTCAAcattcttCaCtcTatTTGaTgTtgAaAa...gATagtacac	696
Seq_ID_15	cCaaaGAcTTCaAacTCAAcattcttCaCtcTatTTGaTgTtgAaAa...gATagtacac	697
Seq_ID_4	cCaaaGAcTTCaAGcTCAAcattcttCaCtcTatTTGaTgTtgAaAa...gATGgtacac	697
Seq_ID_3	cCaaaGAcTTCCAacTCAAcattcAtCgCtcTatTTGaTgctggaAa...gAatgCaAGt	696
Seq_ID_10	ggaaaagcaTtaccTagttctGtgAtgcCacTgTgTaTgctggaA...ATGCCagcc	1234
Seq_ID_5	ggCaatccTTtgAccgatgcCaAAttgcCggTgGTTTaTtcCggcgac..tgTGgtagcA	1132
Seq_ID_8	ggCaatccTTtgAccgatgcCaAAttgcCggTgGTTTaTtcCggcgac..tgTGgtagcA	1132
Seq_ID_16	ggCGatccgctCgGggattcaaAgctacCtcTtGTTactcCggtgac..tgcGggagtc	1155
Seq_ID_13	.....	0
Seq_ID_12	tgCatGttcTtCccTattAtaaAtgttgTctcaGcaaaagctccccatgcttcaCTgac	780
Seq_ID_9	gaCaaaAtaTCgtcaaaaAGCacgtGaatttgggTcccTgctttGgaaa.gATGggacac	456
Seq_ID_6	tCgatatcTTgggagagtgaAaAgcaCaatgTtaggagcCcCtttgCtggtATGtggtt	505
Consensus	c aagacttc a aac a t ct t tt atgc g a atgg a	

Seq_ID_17	GGAGAAGGAAC TGGAGAAAAATGCACA..CAAATTCGCAGTCTGCTATGACAC.....	1209
Seq_ID_7	tgacaAGGAAC TgcAGAAAAATGCACA..CAAATtGttGTCTGtctcGACAA.....	757
Seq_ID_11	taAGcAGGAAT TgcAaaAtgtTaCagA..CAAATtGtgGTCTGcAtTGACAA.....	983
Seq_ID_14	GagcAAccAgtaGccccctttcTGCAtAc.CAGgaTCaCtcaCTGacccttCt.....	747
Seq_ID_15	GagcAAccAgtaGccccctttcTGCAtAc.CAGgaTCaCtcaCTGacccttCt.....	748
Seq_ID_4	GagcAAccAg.aGccccctttcTGCAtAc.CAGgaTCaCtcaCTGacccttCtataagggg	755
Seq_ID_3	GatcAAGatg...ctccAttcTGtAgAt.CgtgggCGatGaCTGaTcctgCtatcaaagg	752
Seq_ID_10	aagcAtcaAA.TGGcaAtttATGCACA....AgTgGtAGTCTGaTtccAgAaaaagttg	1288
Seq_ID_5	aatactGttAtccagGAAAgcTagAtcc.tAAAAaaGtcGcagGaaAaattgttt.....	1186
Seq_ID_8	aatactGttAtccagGAAAgcTagAtcc.tAAAAaaGtcGcagGaaAaattgttt.....	1186
Seq_ID_16	aactctGttAtccagGAAtgcTGgAtcc.ttcAaagGtAGcGgAaaAaattgtat.....	1209
Seq_ID_13	.....	0
Seq_ID_12	GatGctctcttatGcaAAgctgGggCAT.tggAccCaaAGaagGtaAaGgtAacta....	835
Seq_ID_9	acAaAgTGagaaGcAcAAAttgTGatCac.atggcTaGCAtcaattTAGttCAGcttg...	512
Seq_ID_6	cagcAAaattttcaataAcAgtaGattAtaCAAAATaaCtttaaTatgtacAttgtgtatc	565
Consensus	a aa a t g aat tg a a ca a t g g ctga c	
Seq_ID_17	.....GAACGGATCAGTAAGTGACCAATGTACAAT.G	1241
Seq_ID_7	.....GAAtGatTCgGTTgGTGAgCATgTGTACAAT.G	789
Seq_ID_11	.....aAACGcATtgGTcGgAaCAAgTtgAaAgT.G	1015
Seq_ID_14	.....	747
Seq_ID_15	.....	748
Seq_ID_4	aaagatagttgtgtgcttggttggttggtggCGttcgtacggtTGAtaAAggacAagtT.G	814
Seq_ID_3	taagatagtccttggtgtcaaaaagacccaAgtaGtctcaccAGTagtCAAggacgaAAT.G	811
Seq_ID_10	atgggaaaattgtagtatgtgacagagGgAtGaATgcaaggGcacagAAggGTTtggtTtG	1348
Seq_ID_5	.....tatgcatagggGAGggcaAcgctaggGTtgaaAAagGgAggtgcgG	1231
Seq_ID_8	.....tatgcatagggGAGggcaAcgctaggGTtgaaAAagGgAggtgcgG	1231
Seq_ID_16	.....tatgtgatcgagGcggcaATgctagAGTagagAAagGaAgtgcaG	1254
Seq_ID_13	.....gAcagAaTtgaaAAagGacaAgctG	25
Seq_ID_12	.....tttttagtttgtctaagagGAgataATacGaggGTTgaCAAggGacagcaaG	886
Seq_ID_9	.....ccatttagtaactagcattttGttTgctgAgGatAatAAaaaacatgTtG	562
Seq_ID_6	tgtgtatcgtcgtacacctctagcctccGAGtatgTactatgtTGtattAcgtacCtTaG	625
Consensus	ga t c ggt a aa gg t g	
Seq_ID_17	TAAAAAACACAAAAGTTGCTGGTGGCATCTTCATAACAAATTAC.....ACTGACTTGG	1295
Seq_ID_7	TAAgAAAttCAAAAGTTGCTGGGgctgTCTTtATAActAATaca.....ACTGACTTGG	843
Seq_ID_11	TgAgAcAttCAAAAGcTGCTGGTGGctgTCTTCATAACAAATgActttgtcACTGACTTGG	1075
Seq_ID_14	.....	747
Seq_ID_15	.....	748
Seq_ID_4	TAAAggAtgCtggAGgTGtTGGcatgATtctTtATcAatAATccagaagatggTGttacta	874
Seq_ID_3	TAAAggACgCtggAGgcGtTGGcatgATtctTCATcAatAATccggaagatggTGtCacta	871
Seq_ID_10	TcAAAgAtgCtggGgaataGGgatgATtTTggcAAacAcagAcTcttacggaGAtgaGt	1408
Seq_ID_5	TgAAAgAggCAGgcGgaGtaGGgatgATacTtgctAatttggctgactccggcGAagaac	1291
Seq_ID_8	TgAAAgAggCAGgcGgaGtaGGgatgATacTtgctAatttggctgactccggcGAagaac	1291
Seq_ID_16	TgAAAtttagCcggcGgTGcAGGTatggTCcTggcgAatttagctgactccggcGAagaac	1314
Seq_ID_13	TAAAgAACgCtggAGgcGtTGGcatgATtctTCATcAatcggcttcaggacggTtcaacta	85
Seq_ID_12	ctgcttttgCAGgtGcaGtTGGaacgATtctTagccAacgATTAtgcatctggcGATgaaa	946
Seq_ID_9	cggcAAAgTcCctgtgtTttTcagcagTgTTttcAgTAgAaaAtagtttcttTtgtTcat	622
Seq_ID_6	c.....CtCtgAgtaTGtactatGttgtaTCATcgtAccTctagcctccgagtAtgTac	679
Consensus	t aa a gc gg gg gttgg a gat t aa cgg ga	

Seq_ID_17	AATTCTACCTCCAAAGC..GAATTCCTCCGGCTGTGTTTTTGAACTTTGAAGATGGTGATAA	1353
Seq_ID_7	AATTCTACCTCCAAAGC..GAATTCCTCG.....	869
Seq_ID_11	gcgaaTACCTCaAAAcA..GAATTCCTCATCTGTGTTTcTGAATTTccAAaATGGTGATcA	1133
Seq_ID_14	.....	747
Seq_ID_15	.....	748
Seq_ID_4	AATcagctgaagctcat..GtccTtCCaGCaTgGatGtTtcagaTgcAGATGGaaAgAA	932
Seq_ID_3	AATcagctactgctcat..GttcTtCCcGCatTagaTgTttcacaTGAAGaAGGaGAgAA	929
Seq_ID_10	tggTtgctgatgcnat..ctcaTaCCaCaGgtgcagTtggTcaaaactGcTGGTGAntt	1466
Seq_ID_5	tcgTCgcCgattcAcat..cttcTCCCGGCgacGaTggTcggTcaaaaAAGcTGGaGAcAA	1349
Seq_ID_8	tcgTCgcCgattcAcat..cttcTCCCGGCgacGaTggTcggTcaaaaAAGcTGGaGAcAA	1349
Seq_ID_16	tcgTCgcCgattcAcat..cttcTaCCCGCgacaaTggTcggTcaaaaAAGccGGTGAcgA	1372
Seq_ID_13	AATcagcCgatgctcat..GtccTtCCCGCccTgGatGtTttcaTTTtttGATGGattTcA	143
Seq_ID_12	ttTTtgctgattctctCtcGtcTTACCTGCTacGcaaaTtAgtTacactGATGGactTgA	1006
Seq_ID_9	tAcTagctacttAtAtt..GccaaattattTGTGgcagctA.CTaaaATGATGaattTgg	679
Seq_ID_6	tAcgtTgtaTtaCGtaCctctAgcCtCtGagtatgTacTatgtTgTatcaAcGtaccTct	739
Consensus	t gc t c cat gt t cc gc g gt a gatgga a a	
Seq_ID_17	AGTTTTGGAGTACATCAAGAATAGCCATTACCAAAAAGCAAGGCTTGAATTTCAAGTGAC	1413
Seq_ID_7	.....	869
Seq_ID_11	AGTTTTGAAaTatgTtAAcAgcActtcTTCACCAAAAAGCAAAaGaTTGgAcTTCAAGgGAC	1193
Seq_ID_14	.....	747
Seq_ID_15	.....	748
Seq_ID_4	AaTtTtGccTACATaAAActcaAcgtcgaatCCTgttGctgcaaTcaccTtCAtGgaAC	992
Seq_ID_3	AaTTaaGGccTAtATaAAAttcaActtcaaatCCTAttGctgcaaTTacATTcCAGGgaAC	989
Seq_ID_10	gaTcnaaagGTACATtgcttcTgaCagTaatCCAAttaCcAcaaTTGcATTTggAGgtAC	1526
Seq_ID_5	AaTaagacAcTACgTaAcGtcTgatCcTTCACCCAcgGCgAcGaTcGtgTtcagAGgaAC	1409
Seq_ID_8	AaTaagacAcTACgTaAcGtcTgatCcTTCACCCAcgGCgAcGaTcGtgTtcagAGgaAC	1409
Seq_ID_16	AaTaagGGAtTACgTCAAAatcTgattcaTACCAAAAAGCgAcGaTTGttTtcaAAGgaAC	1432
Seq_ID_13	AaTTactGAGTAtATgAAatcaAcaaAgaatCCTgttGctAGaaTTacATTcCAAGgaAC	203
Seq_ID_12	Act.....CtTtAgttcaAcaagTatACCTAcAGCttccaTTacAcaTcCAacGAC	1057
Seq_ID_9	caaTagGagccAaAaaAaaAaaAaaagggCggCgcg.....	716
Seq_ID_6	AGccTccGAGTatgTagtatgTatatcaTtg..tAtctttAGGCcTcAAAAaaAaaaaAa	797
Consensus	aat ta t a tc a cc a gc a att tt agg ac	
Seq_ID_17	ACATCTTGGTGCTAAA...CCAGCACCAAAAGTTGCTAGCTATAGCTCAAGGGGACCATC	1470
Seq_ID_7	.....	869
Seq_ID_11	ACTaaTTGGTGtgcgAA...CgAGCACCAgctGTcGCgcatTtTAGtTCgAGGGGgCCATC	1250
Seq_ID_14	.....	747
Seq_ID_15	.....	748
Seq_ID_4	tgtactTTGGaGaTAAA...aatGCTCCTAtAGTTGCTtcaTtTtctTctcGaGGACCAag	1049
Seq_ID_3	AgtaaTaGGaGaTAAA...aatGCTCCTAttGTTGCTtcaTtTtctgCtcGaGGACCAag	1046
Seq_ID_10	caAgtTgGGcGtccAA...CCAtCACCGgtcGTcGCagctTtTAGtTCcAGaGGGcCCAaa	1583
Seq_ID_5	AgtgaTcGGaaaatcAccggCAGCACCAcgtGTaGCggcgTtctcgagccGaGGACCTaa	1469
Seq_ID_8	AgtgaTcGGaaaatcAccggCAGCACCAcgtGTaGCggcgTtctcgagccGaGGACCTaa	1469
Seq_ID_16	tgtaaTcGGaaaatcAccgtCtGCTCCAcgtaTTGCTgcgTtctcaggccGaGGACCCaa	1492
Seq_ID_13	gataaTaGGcGaTAAA...aatGCTCCAgTgcTTGCTgGtTtTtcaTCTcGcGGACCAag	260
Seq_ID_12	t.taATTGGgaacAAA..gCCAGCTCCAgTcaTaGCagcCTtTtcaTCAAtaGGACCTaa	1114
Seq_ID_9	.....	716
Seq_ID_6	AaAaaaaaaaaaAAA.....	813
Consensus	t at gg a aa gc cc t gc tt g ggacc a	

Seq_ID_17	AGAAAGCTGCCCTTTTATCCTCAAACCTGACCTGATGGCTCCTGGAGCCTTAATATTAGC	1530
Seq_ID_7	.....	869
Seq_ID_11	AatgAcCTGCCCGTTTATCCTCAAACCTGACCTGATGGCTCCaGGtcaCTTAATAcTAGC	1310
Seq_ID_14	.....A.....	748
Seq_ID_15	.....	748
Seq_ID_4	cGAAGcaaGtCgTggcATCtTgAAACCTGAtaTtATtGgTCCTGGtGttaatgTccTtGC	1109
Seq_ID_3	ccgAgcaaaCCCTggcATCtTaAAACCTGAtaTtATtGgTCCTGGtGttaatATccTtGC	1106
Seq_ID_10	cccAAtCacaCCggagATCCTtAAACCaGAttTGATaGCaCCaGGtGtCaatATtCtTtGC	1643
Seq_ID_5	tcAtttgacgCCggagATtCTtAAACCGGAtgTtATtGCaCCTGGAGttaacATtTTgGC	1529
Seq_ID_8	tcAtttgacgCCggagATtCTtAAACCGGAtgTtATtGCaCCTGGAGttaacATtTTgGC	1529
Seq_ID_16	ttAtgtaacaCCggagATCCTtAAACCGGAtgTtActGCaCCaGGAGtCaacATATTAGC	1552
Seq_ID_13	cacAgctaGtCCTggaATCtTgAAACCTGAtaTtATtGgTCCTGGtGttaatgTccTAGC	320
Seq_ID_12	cactgttacaCtggagATCCTtAAggtT..ttacgcaGgTtCatGAtttTTtgacacgaC	1172
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	a cc g atc t aaacc gat t at g cc gg gt t t gc	
Seq_ID_17	CTCATGGCCTCAAAAATCACCGGCAACTCAAATTCGCTCAGGAGAGCTTTTCAGTAACCTT	1590
Seq_ID_7	.....	869
Seq_ID_11	tTCATGGtCTCcActATCATCtGtgAgTCcAtaT.....actGAaCTTcaCAaTAtCCTT	1364
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	tgCtTGGCCTacctcAgtAgataac...aAcAaa.....aAcacaaaatccAcaTT	1157
Seq_ID_3	tgCtTGGCCTaccAccgtgaatatccCcaAcAaa.....aAcacaaatccTggaTT	1157
Seq_ID_10	tggcTGGaCaggAAAgttggacCAACaggttTgCcagaAGacaccaggaatgtgggtTT	1703
Seq_ID_5	CggtTGGaCcggAtctgttggacCgACcgAttTggatattGacacGagaagagtagAaTT	1589
Seq_ID_8	CggtTGGaCcggAtctgttggacCgACcgAttTggatattGacacGagaagagtagAaTT	1589
Seq_ID_16	CggtTGGaCcgggtccatAggacCAACagAttTggaaattGataccagacgagtggaAaTT	1612
Seq_ID_13	agCtTGGCCTacttctgtcgaa..AAC.....aaaaCcaacaccaaTcaAc...aTT	368
Seq_ID_12	aTCTTttCtTgAAAgaTCAGgaaacgacatctTTtctTgAagatcaggaaCtt.gAagT	1231
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	tgg c a a tt	
Seq_ID_17	CAACATCATATCAGGTACGTCAATGTTCATGCCCTCATGCAGCTGGTGTAGCAGCACTTCT	1650
Seq_ID_7	.....	869
Seq_ID_11	tAACATtATATCtGGcACaTCcATGTCATGtCCaCaGcTGCcGGTGTAGctGCACCTgT	1424
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	CAAtATCATATCAGGcACaTCAATGTCTtGCCCTCA.....	1193
Seq_ID_3	CAAtATCATATCAGGcACaTCAATGTCTtGCCCTCA.....	1193
Seq_ID_10	CAACATCATcTCtGGaActTCcATGTCATGtCncCATGtAagTGGgcTtGCAGCAnTaCT	1763
Seq_ID_5	CAAtATtATtTCtGGaActTCcATGTCgTGCCCTCAcGttGggGGatTgGCTGCTtTaCT	1649
Seq_ID_8	CAAtATtATtTCtGGaActTCcATGTCgTGCCCTCAcGttGggGGatTgGCTGCTtTaCT	1649
Seq_ID_16	CAACATtATATCtGGTACaTCcATGTCTtTGtCCTCATGttagcGGgtTAGctGCTtTaCT	1672
Seq_ID_13	CAACATaATtTCcGGTACcTCTATGTCATGtCCTCAccttagcGGaGtTGCAGCATTgtT	428
Seq_ID_12	CtgaAgaAgcTatGcTtgaagAATaTgcgGagCaagTtgAagcacaATatagttttTgtT	1291
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	caa at at tc gg ac tc atgtc tg cc ca t t t	

Seq_ID_17	GAAAGGAGCACACCCCAAATGGAGTCCTGCTGCCATCCGGTCGGCCATGATGACCACAGC	1710
Seq_ID_7	.....	869
Seq_ID_11	tAAAGGgaCcCACCCtgAATGGAGcCCaGCTGCCAtTCgtTCGGCCATGATGACTACAGC	1484
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	GnAAGccGCCaTCCagAATGGAGTtnaGggGtnATaaGGTCaGCacTGATGACTACAGg	1823
Seq_ID_5	tAgAaGgGCCcACCCaAAgTGGAccCCaGCaGCcgTaaaGTCaGCacTtATGACaACAGC	1709
Seq_ID_8	tAgAaGgGCCcACCCaAAgTGGAccCCaGCaGCcgTaaaGTCaGCacTtATGACaACAGC	1709
Seq_ID_16	tAgAaaAGCttACCCTAAATGGAccaCaGCaGCCATCaaaTCtGCCcTcATGACaACAGC	1732
Seq_ID_13	aAAAaGcGcGcCACCCtActTGGtcccCCTGCaGCTATtaaaTCaGCaTcATGACaACcGC	488
Seq_ID_12	ctgttagtagCAgtttAAAgatttTgtcatTtgtAcatcGTgtatagTtcTaAtgtCtGt	1351
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	a t t t a c g	
Seq_ID_17	CGACACGATGGATAACATGCAAATGCCCATCCGAGACATAGGTCGC...AACATAATGC	1767
Seq_ID_7	.....	869
Seq_ID_11	gGatgttcTaGAcAACAcAAAgTCCgATCCaAGACATcGGTCGtccagAgAATgcTGC	1544
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	ttACAgcAcacAcAAGAatggnaaatgATagagGAt...GTtGCCacAggAATgtcat	1879
Seq_ID_5	ttACAactTGGAcAAttctggTaaagtatTtacAGAtcTtGccactggccAagA.....	1763
Seq_ID_8	ttACAactTGGAcAAttctggTaaagtatTtacAGAtcTtGccactggccAagA.....	1763
Seq_ID_16	ttACAacgTtGATAACtccggcAaaaCCtTtacAGAtcTcGcgacaggccAggA.....	1786
Seq_ID_13	tGAtACagTcaAcctCgccaAcAatCCCATattAGAtgaAatgCtCcgtcctg.....	541
Seq_ID_12	ttttA...GGAgttgATaaAAATagtgTcatGcaAttTgtTgGgtatAtttATtgaca	1407
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	a a	
Seq_ID_17	TGCCAGTCCCCTAGCCATGGGAGCTGGCCGTATCAATCCAAATAAGGCACTAGACCCTGG	1827
Seq_ID_7	.....	869
Seq_ID_11	TGCTAcTCCtCTtGCTATGGGAGCTGGCCaTATCAATCCtAAcAAGGCAaTAGAtCCTGG	1604
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	a..tAcaCCagTtGatcatGGcGCTGGaCaTgTgAATCCAgcagcaGCTaTgaAtCCTGG	1937
Seq_ID_5	atCtAcTCCtTcGttcatGGAtCaGGtCaTgTagAcCCgAAccgaGCAtTgGAtCCgGG	1823
Seq_ID_8	atCtAcTCCtTcGttcatGGAtCaGGtCaTgTagAcCCgAAccgaGCAtTgGAtCCgGG	1823
Seq_ID_16	atCgAGTCCgtTtGttcacGGgtCgGGtCaTgTggATCCgAAcAgaGCACTAGAtCCaGG	1846
Seq_ID_13	..CaAacatCtTtGCCATtGGtGCaGgaCaTgTCAATCCAtcacgaGCAaatGAtCCaGG	599
Seq_ID_12	TtgtgaTCCttcgGtttTttataaTGaaCaatgaAATtttgtggAaaaAaaaAaaaaaa	1467
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	g g c a a	

Seq_ID_17	ACTTATCTATGACATTACATCACAGGACTATATCAATCTCCTCTGTGCTCTAGATTTTAC	1887
Seq_ID_7	.....	869
Seq_ID_11	ACTcATCTATGAtAcaACaCCACAaGAtTAcATtAAATCTtCTtTGTGCTCTAaATcTcAC	1664
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	gtTagngTATGAtcTcACAgttgAtGACTATATaAActTCCTtTGcGCCcTgGATTacAg	1997
Seq_ID_5	ttTgATtTAcGACATcgaAaCtagcGATtAcgTaAAATtTCCTaTGctCcaTgGcTTaTga	1883
Seq_ID_8	ttTgATtTAcGACATcgaAaCtagcGATtAcgTaAAATtTCCTaTGctCcaTtGgcTaTga	1883
Seq_ID_16	tCTTgTCTAcGATATTgacaCgaAGGAtTAcgTggATtTttTaTGcGCCaTtGgTTaTga	1906
Seq_ID_13	ACTagTtTAcGATAcacaATTcaAGGAtTAcATatcTtattTaTGTGgTtTgaAaTAcAC	659
Seq_ID_12	AaaaAaaaAaaAaA.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	a a	
Seq_ID_17	ATCTCAACAGATAAAAGCCATTACAAGGTCCTCTGCTTATTCCTGTTCCAACTCATCATT	1947
Seq_ID_7	.....	869
Seq_ID_11	ATCcgAgCAGATAAAAaCCATcACTAGGTCCT...CTTATaCtTGccCCAACcCATCATT	1721
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	tcCaagtatGATcAAgGtCATcgCAAAgCgagaTatTTccTgCgnaaaCAataaggataT	2057
Seq_ID_5	cggcgAcgAtgTcgccGtgtTcgCgAGagatTCTtCTcgagtgaaTTgCagtgaAcgAag	1943
Seq_ID_8	cggcgAcgAtgTcgccGtgtTcgCgAGagatTCTtCTcgagtgaaTTgCagtgaAcgAag	1943
Seq_ID_16	tcCcaAAagaATttcAcCgtTcggtAaagataCTtCTTcagtgaaTTgCAGCgaAaagaa	1966
Seq_ID_13	AgaTCgACAGATgggAagCcTTctAcaacgCa.....gaaCaaGTTgCtcgaaAgtgaa	713
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		
Seq_ID_17	GGATTTAAACTATCCATCATTCATAGGCTATTTCAATTATAACAGCAGCGAGTCAGACCC	2007
Seq_ID_7	.....	869
Seq_ID_11	GGAccTAAACTATCCATCtTTCATtGcCTATTTCAAcgtgAatAGCAGCGAGTtgGAtCC	1781
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	aGAGTTg...CTgaCCtTaATTacccatCTtTTgCcATTcctttgGaAaCGgGcCtGgggC	2115
Seq_ID_5	tttggtActccgggAgaccTgAattaCccgTcgttcTccgttggttttaccggtGAgag	2003
Seq_ID_8	tttggtActccgggAgaccTgAattaCccgTcgttcTccgttggttttaccggtGAgag	2003
Seq_ID_16	tttagTtAgtccgggggatTTgAattatccaTcgttcTcagttgtatttGgcagtG....	2022
Seq_ID_13	aagTaTtcctgAagCAcaAcTCAattaCccTTcggttTTccAtttcacttGg.agca....	768
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		

Seq_ID_17	TAAAGGATACAAGAATTCCAGAGGACGGTGACTAATGTAGGAGAAG...GTATGTCTGT	2064
Seq_ID_7	.....	869
Seq_ID_11	TAcAAGagTACAAGAATTCaAGAGGACaGTGACTAATGTcGGAGAAG...GTgTGTCgGa	1838
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	gAAcAtGcaAatAGtAgTgCaccaacaGtgacCagATaTAcGAGgAc...tctaacaac	2172
Seq_ID_5	cAAcgGtgTggttaAATaCaAGcGGgtGGTGAaTAATGTAGGAaAAaatacagatgCTGT	2063
Seq_ID_8	cAAcgGtgTggttaAATaCaAGcGGgtGGTGAaTAATGTAGGAaAAaatacagatgCTGT	2063
Seq_ID_16	..AtAGtgTggtgaAAAACaAGcGtgtGGTtAaaAATGTtGGcaggaatacaAatgCgGT	2080
Seq_ID_13	....AatcaACAAacATaCacaAGaACaGTGACaAAcGTcGGgGAGG...caATGTCatc	821
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		
Seq_ID_17	ATATACAGCCAAATTGACCTCAATGGGTGATTATAAAGCTAGTGTGCACCTGACAAGTT	2124
Seq_ID_7	.....	869
Seq_ID_11	ATATACAGCCgAgcTGACTgCAATGccTGgactTAAAGtTAGTGTGttCCTGAaAAGTT	1898
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	gTgggaAatCcAgcTacataCAAgGccTcAgTcTcttctgAaatgcaggaagtgaAgaTT	2232
Seq_ID_5	gTATgaAGtgAAGgTGAatgCgccGtcgtcggtggAgGtgAaTGTatCACCGGcgAAGcT	2123
Seq_ID_8	gTATgaAGtgAAGgTGAatgCgccGtcgtcggtggAgGtgAaTGTatCACCGGcgAAGcT	2123
Seq_ID_16	gTATgagGtgAAAAaTaAatgCgccGGGTtcggtggAgGtgAagGTgaCtCCgactAAGcT	2140
Seq_ID_13	tTATcgGtgAgaTagttTCaccacaaaATgtTcccGtTgtTGTtaagCCTtcaActcT	881
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		
Seq_ID_17	GGTTTTCAAAGAGAAGTATGAAAAGCAAAGCTACAAGCTAAGGATAGAAGGTCCATTGCT	2184
Seq_ID_7	.....	869
Seq_ID_11	GGTTTTCAAAGAcAAGTATGAAAAGCAAAGCTACAAGCTgAGGATAGAATGTCCa aa CT	1958
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	caggTTgAAccAcAAacActtActttcAgTcGaaAg...AAGGAaAagAaaaCCTacaCT	2289
Seq_ID_5	tGTaTTCagtGAGgAaaAgcAAAgtttgcgTatgAGaTtAGctTaaAgaGTaaAaaGag	2183
Seq_ID_8	tGTaTTCagtGAGgAaaAgcAAAgtttgcgTatgAGaTtAGctTaaAgaGTaaAaaGag	2183
Seq_ID_16	tagTTTtAgcGAGAAaaATaAggtttgcgTatgAGaTtAGttTtagcaGtaatggaag	2200
Seq_ID_13	aaaaTtAcgaAGttGaATcAgAAGttgAcaTACcgagTgAcatTttccacaaCAacaaa	941
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		

Seq_ID_17	AGTTGATATTATCTTG. TTTATGGTTCTTTGAGCTGGGTGGAACTAGCGGTAAATATGT	2243
Seq_ID_7	.....	869
Seq_ID_11	gaTgaATgaTtTCTTGgTTcATGGTTCTTTaAGCTGGGTGGAAAaggGaGGTAAATATGT	2018
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1193
Seq_ID_3	.....	1193
Seq_ID_10	gtgacATtcacTgcTagTTccaaGccaTcaGgcacaaTaGctttgctCGactggaATGg	2349
Seq_ID_5	tGgTGATtTgcagaTGg. TgAaGGggaTTgaAtCTGcaT. . . . ttggGtcGattgaATGg	2238
Seq_ID_8	tGgTGATtTgcagaTGg. TgAaGGggaTTgaAtCTGcaT. . . . ttggGtcGattgaATGg	2238
Seq_ID_16	tGTTGggtTggagagag. TaAaaGgTCTTgaAtCaGcaT. . . . ttggGtcaattgagTGg	2255
Seq_ID_13	ca. TcAcaaacaTggaAGtTGttc. . . . AtggatacTtgAaATGg	981
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		
Seq_ID_17	TGTAAAAAGTCCCATTTGTCGCAACTA. CCATAAGAGTGGATCCTCTGTGAGGACAGAACT	2302
Seq_ID_7	.....	869
Seq_ID_11	aGtTAaggAGcCCaATTGtTGcCaCaattcTtAagtTtGATCCTtTGacAGGAtAGtACT	2078
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....C.....	1194
Seq_ID_3	.....C.....	1194
Seq_ID_10	TcagAtggacaaCATgtTgttgctagcCCAattGctTtcAgttggacatgattatGctaa	2409
Seq_ID_5	aGTgAtggaattCacaaTgtgAgaagcCCAattGcGgtGcgttggcGTcActAttctgaT	2298
Seq_ID_8	aGTgAtggaattCacaaTgtgAgaagcCCAattGcGgtGcgttggcGTcActAttctgaT	2298
Seq_ID_16	aGTgAtggaattCacaGcgtgAggagcCCAattGcGgtGcattggctactccACTctgCT	2315
Seq_ID_13	acaAgtgAaagCATTtTgtaAgaagcCCAattGctgttATtCTacaaGAGcAtgaAAcA	1041
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus	C	
Seq_ID_17	GATTATGAGTCCTGTATTCTGAAAATGTGATACAGTGATGAATAATTGTGAAGTTAAATT	2362
Seq_ID_7	.....	869
Seq_ID_11	GATTActga. . . . aTATTCcactAAacatgTctttTGagaAcatgaTaTatAcaTActTg	2134
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1194
Seq_ID_3	.....	1194
Seq_ID_10	ttcTATAAGTCaTtcActTgcaAAtgTacaAgtgcaaatattcctATAaaatAaTTActag	2469
Seq_ID_5	GcagcatccatgTGagTaaTGgAtgatTGtTctttatATTgcattgcaTGgAccaAtAaa	2358
Seq_ID_8	GcagcatccatgTGagTaaTGgAtgatTGtTctttatATTgcattgcaTGgAccaAtAaa	2358
Seq_ID_16	acagAatctcagTGagcaatGGActatgaAgcaAGAagata. attgTGctAAtcTgcAaa	2374
Seq_ID_13	ccagAaGAtTagTG. . TctTtActtTtTaATAattTGTtCaAATttaTaataAAccc. cgTa	1098
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		

Seq_ID_17	CAAAAAAAAAATCTTTTCAGTTAGTTAAAACTAACTTGCTGATTAAAAAAAAAAAAAAAAAAAA	2422
Seq_ID_7	.....	869
Seq_ID_11	tgAAgtgtAgTtcTaTggtTcAcantnnAaaAAAAAAAAAAAAA.....	2188
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1194
Seq_ID_3	.....	1194
Seq_ID_10	tgtgcAgcAgctacTcCtcTaAtaTtccACCACTasaaaaAaTAgccctgAcctAtAAtt	2529
Seq_ID_5	CtgggAtgA.TgacaaattgaAagacgAAaTggtgctagaggatcAtcgAAtttgtccAA	2417
Seq_ID_8	CtgggAtgA.TgacaaattgaAagacgAAaTggtgctagaggatcAtcgAAtttgtccAA	2417
Seq_ID_16	CtgttAtgggCagaaacaggAacaAggctaAgtTcagaaAggAAAAggAAAtAgggAAg	2434
Seq_ID_13	ttA..AttgATtgTaTCaaaAtgTAGAAtgAgtgcaaaaATTgctcAtgttttAttctA	1156
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		
Seq_ID_17	AAA.....	2425
Seq_ID_7	.....	869
Seq_ID_11	.....	2188
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1194
Seq_ID_3	.....	1194
Seq_ID_10	AAgatgcctaggaattcttagcatctagacaaggaaaatggttggttgatttgtccagcaa	2589
Seq_ID_5	ctt.taatttcactttctttaccttttgttctctgatggttgcagattgatgtatatat	2476
Seq_ID_8	ctt.taatttcactttctttaccttttgttctctgatggttgcagattgatgtatatat	2476
Seq_ID_16	g...aacatctatctgttgaataatgttaagaaattttcatcattcttttct...tgt	2487
Seq_ID_13	ctggtgatatttcccttggtggtaaaaa.....	1193
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		
Seq_ID_17	.....A.....	2426
Seq_ID_7	.....	869
Seq_ID_11	.....	2188
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1194
Seq_ID_3	.....	1194
Seq_ID_10	aagacAggtgttttacttgccagattattatgtaccaagccacacaatatggataaatac	2649
Seq_ID_5	gaatgAagcatacccagttgtttccagaaaaa.....	2533
Seq_ID_8	gaatgAagcatacccagttgtttcacagaaaaa.....	2532
Seq_ID_16	ttatgAgtattttatcag....ccacaaaaa.....	2538
Seq_ID_13	.....	1193
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		

Seq_ID_17	.....	2426
Seq_ID_7	.....	869
Seq_ID_11	.....	2188
Seq_ID_14	.....	748
Seq_ID_15	.....	748
Seq_ID_4	.....	1194
Seq_ID_3	.....	1194
Seq_ID_10	aattggctttcg	2691
Seq_ID_5	.....	2533
Seq_ID_8	.....	2532
Seq_ID_16	.....	2538
Seq_ID_13	.....	1193
Seq_ID_12	.....	1481
Seq_ID_9	.....	716
Seq_ID_6	.....	813
Consensus		

Figure 16B

